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This Month in

DW
and

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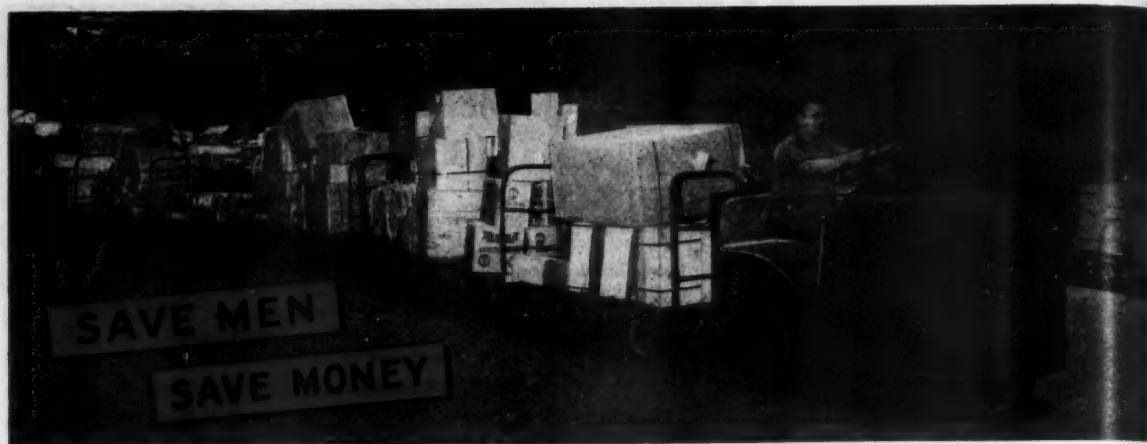
The Magazine that Integrates
All Phases of Distribution

THE publication in which shipper, carrier, receiver, warehouseman and equipment manufacturer meet on common ground to obtain and exchange ideas and suggestions for more efficient and economical distribution of raw materials and finished products.

D and W is a clearing house of information for all who are interested in distribution of anything, anywhere from points of origin and production to points of ultimate use and consumption whether sectional, national or international.

D and W takes the position that more efficient and economical distribution is the present major problem of modern business.

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SAVE MEN

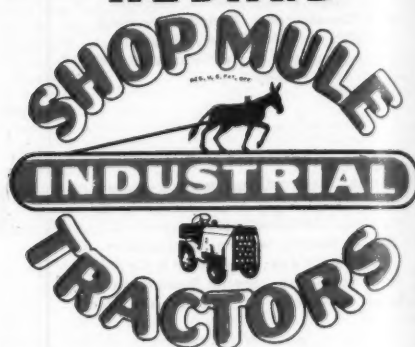
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Shop Mule**

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NEAREST INTERNATIONAL HARVESTER INDUSTRIAL DEALER

MODERN WAREHOUSING METHODS CALL FOR SHOP MULES

War-time labor shortage has further revealed the economy and efficiency of the SHOP MULE. Used in conjunction with Fork Lift Trucks, these sturdy tractors pave the way to the lowest known costs for moving goods in and out. When you SHOP MULE-IZE you MODERN-IZE!

Water Transportation

SINCE primitive times, ways have been vital for war and commerce, still the two most engrossing activities of the human race. This was never more true than it is today. The stress of war has demonstrated in many ways the military and economic importance of our rivers, lakes, canals and inland seas. Without our extensive intra-coastal waterways system the movement of the present enormous tonnage of war-time freight would be utterly impossible.

In each of the past three years, the movements of commercial freight of all kinds in the United States have exceeded a trillion ton miles annually. In 1944 they are estimated to have reached one trillion two hundred billion ton miles, compared with three-quarters of a trillion in 1939.

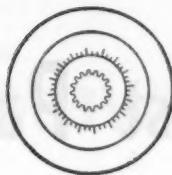
River and canal lines are estimated to have carried one-sixth of all commercial freight traffic in the United States during 1944, or 200 billion ton miles. This compares with a peak of 350 billion ton miles in 1941.

The decline in tonnage may be attributed, perhaps, to increased railroad efficiency, decentralization of war production, more extensive use of pipe lines, to changes in the demand for raw materials and to the transfer of many coastal carriers to deep sea duty. In addition, much of the tonnage normally derived from water transportation on the Great Lakes has been displaced since 1941 because ships have been requisitioned for Government service elsewhere.

An important fact in connection with any consideration of our inland waterways is this: without the low transportation costs made possible by interchange of freight at water-rail terminals a vast tonnage would never reach the railroads. Many traffic men believe it would be a wholesome thing for this country if the interchange of water and rail traffic were more fully developed under proper regulation. It is one of those many ante bellum problems that shippers and carriers will still have to face after the war, and, if possible, attempt to solve in the interest of better distribution.

In view of the manifest value of our inland waterways, the Rivers and Harbors Bill, recently passed by Congress, authorizing construction of a number of important developments and improvements for better navigation, flood control,

Editorials



"... around every circle another can be drawn ... every end is a beginning ..."

irrigation, etc., to be undertaken six months after the conclusion of the present wars, is an encouraging indication that our rivers, lakes, harbors and streams will not again suffer the shameful neglect that was characteristic of our national attitude half a century ago.

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Merchant Shipping

WAR has made the United States the greatest maritime power in history. Why should we relinquish that position? It has been gained at an enormous cost in blood and treasure.

Moreover, we cannot look to others to furnish us the type of dependable overseas transportation that our national security and economic well-being demand. As the world's principal creditor nation, our participation in world trade in the future will be more important than at any time in our history. One of the most effective methods of creating new trade is by the development of transportation facilities.

The problem is complex. Four major questions must be answered before any intelligent solution can be made. They are: 1. How large a merchant marine does the United States need? 2. How much will it cost in subsidies? 3. Would the earnings of an American merchant marine compensate for what might be lost in trade with other maritime nations? 4. Should our surplus ships be sold or chartered to other countries?

Until an honest and painstaking attempt is made to answer these questions on a practical basis no sound, long-range policy can be formulated either for the nation or for private corporations.

Important Distinction

ELSEWHERE in this issue, Henry G. Elwell, whom we are honored to have as our traffic consultant, develops new aspects of what distribution means. In so doing, he emphasizes again the importance of broader concepts of distribution by management everywhere. What he says in his current article on "Cost Factors in Distribution" is sound and practical. It hits the nail of the argument squarely on the head and drives it home with hard facts. It deserves repetition. We quote:

"Without doubt, the weakest link in the cost accounting practice of a majority of our manufacturing establishments is the lack of information regarding cost of transportation. Time and again one finds that the cost analyses of a company do not provide sufficient data to enable management to manage efficiently.

"It is possible that this situation is caused by a misconception of the primary meaning of the term distribution."

After citing a number of examples of different concepts of distribution held by various executives, Mr. Elwell states:

"Frankly, management for one reason or another has failed to give real thought to distribution. As one general traffic manager has stated: 'If I were asked to approximate the time which the average business man devotes to the problem of distribution in relation to his other problems, a figure of 10 per cent would not be too low.'

"Top executives must take action to determine how the cost of distribution can be cut, but they must first understand that the term distribution has a two-fold meaning as follows:

"To industry as a whole: the term distribution may properly cover all activities incident to the movement of all goods in commerce.

"To each individual unit of industry: the term distribution covers all activities incident to the outward movement of each unit's goods in commerce.

"Before the cost of over-all distribution can be lowered, it is essential that the management of each unit of industry reduce its own cost. When this is accomplished then the total cost in all industry will automatically be reduced."

Northeast Passage . . . the

AFTER nearly three decades of effort, it now appears highly probable that construction of the Great Lakes-St. Lawrence seaway and power project will be undertaken as part of the federal postwar construction program. This project has gained staunch supporters and bitter opponents whose economic well-being is directly affected. Because of the magnitude of its contributions to transportation needs of the mid-continent of America and the power requirements of northeastern United States, its completion would affect the daily life of millions.

The project would be a joint effort by the United States and Canada to provide the Middle West with a deep-water outlet to the Atlantic Ocean, permitting seagoing vessels to go as far inland as Duluth, Minn., on Lake Superior, and to harness the torrential flow of the St. Lawrence River for the generation of water power. The St. Lawrence development would be the second largest single-dam power source in the world, both in terms of installed capacity and in terms of average annual production of electric energy, being exceeded in size only by Grand Coulee.

Would Cost \$429,500,000

Total cost of this project would be \$429,500,000, with Canada agreeing to pay its proportionate share. The bill to the United States would be \$285,000,000 of which some \$93,000,000 would be paid by New York State, which would be given control of the generation and distribution of the electric power. The federal government's share would be approximately \$195,000,000.

Now, what would be gained by spending this vast sum of money? The project will take four to six years to construct, during which it will give employment to large num-

WHAT would be gained by spending \$429,500,000 for the St. Lawrence seaway and power project? Supporters of the project say that the principal components of economic life—agricultural production, food processing, the steel industry, automotive equipment, transportation, and machinery production—are centered mainly in the tributary area of the Great Lakes-St. Lawrence project. High incomes for farmers and workers and a steady rate of employment in the postwar period are essential to the well-being of the country as a whole. Vigorous foreign trade, it is believed, would help bring this about. Opponents of the project state that it is likely to divert traffic from railroads, steamship lines and inland waterways; may affect employment in many industries, and that it would impair the policy of Congress to foster the development and maintenance of the merchant marine on essential trade routes.

By ANNA KLINE

bers of skilled and unskilled workers. It will use large quantities of materials and utilize manufacturing facilities during the period of construction, to help bridge the transition period when the United States must provide employment to large numbers of demobilized servicemen as well as unemployed defense workers.

That alone, however, would be scant excuse for such an undertaking. Since the economic welfare of the country depends on the prosperity of all groups and sections, the St. Lawrence project, by developing the economic activities of the Middle West, would not rob other sections of their industries, but stimulate trade throughout the nation.

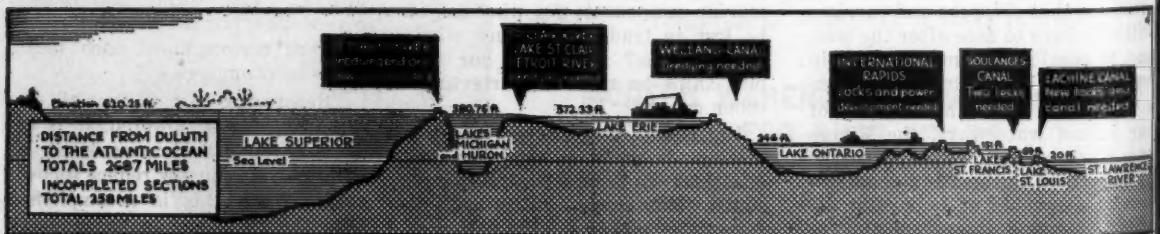
Economic Aspects

Supporters of the project point out that the principal components of eco-

nomic life—agricultural production, food processing, the steel industry, automotive equipment, transportation, and machinery production—are centered mainly in the tributary area of the Great-Lakes-St. Lawrence project. High incomes for farmers and workers and a steady rate of employment in the postwar period are essential to the well-being of the country as a whole. Vigorous foreign trade would help bring this about.

The Middle West has been handicapped in the international market because of the high freight rates to the Atlantic Coast. The St. Lawrence project, by bringing the productive centers of the Middle West to the seashore, will help fill the demand in foreign lands for vast quantities of the products produced inland.

Another advantage will be the utilization of a larger proportion of the merchant fleet, constructed dur-



At a Glance, This Cross-Section Diagram Shows the Scope of the Great St. Lawrence Project and the Improvements Which Are Planned

of the proposed seaway. The St. Lawrence Survey estimated that about 1,000,000 tons of existing traffic of this type, 3 per cent of average annual coastal and intercoastal traffic in New York, would be diverted to Great Lakes ports, but that this loss would be more than made up by new water-borne traffic between New York and the Middle West. With completion of the seaway, grain, cereal products, meats, dairy products, and automobiles would be shipped from the Middle West into New York Harbor, while iron and steel products, refined copper and zinc, brass, sugar, and other commodities would move from New York Harbor through the seaway into the Great Lakes region."

Boston—Boston, Philadelphia, Baltimore, and other ocean ports can ex-

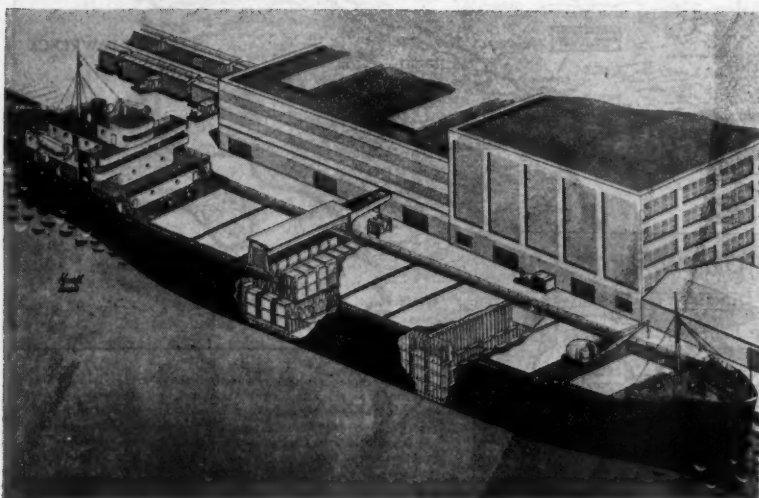
pect substantial gains in shipping traffic, according to Sen. Ferguson, who said Boston Harbor would be one of the chief beneficiaries of the seaway. He said that Boston need apprehend little danger of existing traffic being diverted. It imports large amounts of raw materials and foodstuffs from the Middle West, and with completion of the project, these would be shipped by water from the Great Lakes into Boston Harbor. At the same time, New England shoes, machinery, fish, and other products would move to Buffalo, Cleveland, Toledo, Detroit, Chicago, Milwaukee, Duluth, and other ports on the Lakes. A similar increase in water-borne commerce with the Middle West could be anticipated by other port cities along the Atlantic Coast, he said.

Buffalo—However, the effect of the

project on Buffalo's economic life is not so simple. According to the St. Lawrence Survey, Buffalo will lose some of its grain trans-shipment traffic, estimated at not more than 700,000 tons a season, resulting in the loss of jobs to 200 workers and loss in revenue to grain elevators at approximately \$220,000 a year.

To offset this, flour exports from Buffalo, estimated at an average of 180,000 tons during a normal season, would save as much as \$525,000 a year in freight charges, according to the survey. The iron and steel, machinery, and other major manufacturing industries of Buffalo would find increased foreign and intercoastal markets for their projects. Existing transportation disadvantages in reaching overseas and west-coast markets will be eliminated, and expansion of sales in these markets can be expected. Further, increased shipments of iron and steel products, machinery, and other articles would stimulate increased receipts of ore, coal, limestone, and other raw materials, thus further increasing Buffalo harbor traffic.

New Type Package Freighter For Great Lakes



This sketch shows the self-loading and unloading package freighter designed by Leatham D. Smith of Sturgeon Bay, around which may be built a new post-war freight line between Milwaukee and New York state ports. Freight is packed in steel boxes which are piled in the hold like blocks.

TO assist in reviving postwar shipping on the Great Lakes, the Leatham D. Smith Shipbuilding Co., Sturgeon Bay, Wis., has designed a new type of self-loading, and unloading package freighter, as shown in the artist's drawing. The proposed vessel, according to Leatham D. Smith, head of the firm, will reduce cost of handling lake freight from \$1.20 per ton to an estimated 15c. per ton.

The cutaway sections in the drawing show the patented freight containers which will enable the vessel to be loaded and unloaded in 24 hours of straight eight-hour days, it is estimated by the designer.

The ship's refrigerated holds will provide a vast market for Wisconsin's dairy products and its famed cherries, because perishable commodities can be transported down the Mississippi River, making Eastern and Gulf seaboard markets more economical to middle western producers.

The proposed ships will be 420 ft. in length, have a 59-ft. beam and be twin screw, Diesel propelled. Each will cost approximately \$2,000,000. The maritime commission, Smith said, has indicated a readiness to release surplus materials for the construction of the new freighters as soon as war conditions permit. (Hubel)

Effect on Lake Shipping

Lake shipping operators, which some years ago opposed the project on the ground that they would lose their business to foreign vessels, built and manned by cheap labor, with the result that the wages of lake seamen, now the highest in the world, would have to be reduced, have changed their tune recently.

Foreign vessels would not be able to carry freight between American ports on the lakes, because of federal laws prohibiting freight movements of this type except in ships of American construction and registry. Since the greatest per cent of the normal traffic on the Great Lakes is in the bulk commodities of coal, iron ore, limestone, and unmanufactured steel, this traffic would not be affected by construction of the seaway.

Effect on Railroads

What the seaway would do to the railways is another question bitterly argued about. It has been estimated that the seaway will increase the freight transport capacity by about 10,000,000 tons annually. Since in a normal, good year, the railroads carried 1,000,000,000 tons of freight, the diversion of traffic from the railroads to the seaway shipping services would not be very great.

It was pointed out that the establishment of cheap water transportation would stimulate the shipment of some products which, because of high rail rates, are not now shipped at all, and which, therefore, would represent a net addition to existing traffic. This is what happened following construction of the Panama Canal.

Further, the growth of population and the increased production of industry require constant expansion of transportation facilities to handle the increasing volume of traffic. Much of the commerce moving through the seaway would represent new traffic arising out of the needs of a growing

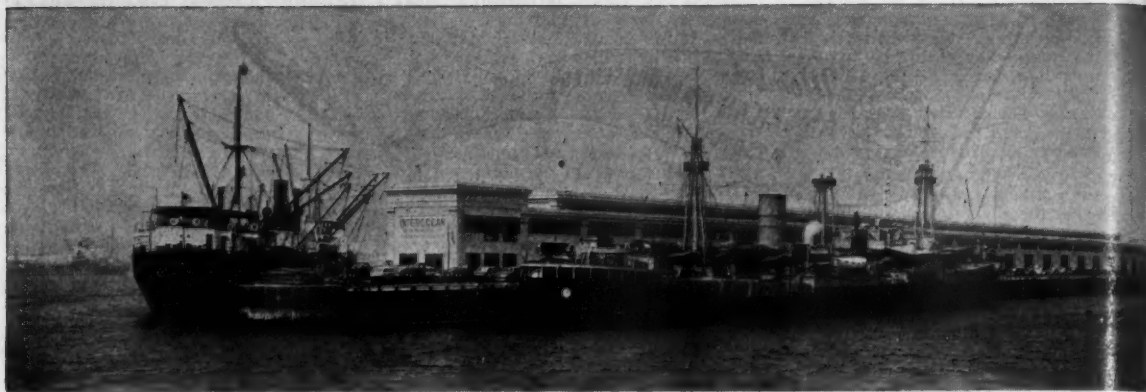
(Continued on page 71)



Re-establishing Distribution in markets which have, for many obvious reasons, been largely bypassed, is like establishing a bridgehead. But the going really gets tough in the business battles beyond the bridgehead. Here the strategy of sales becomes the deployment of material, the ability to economically meet sales at the point of natural or created demand.

The S. N. Long Warehouse knows the full meaning of Distribution. It has recognized and provided since 1903 every modern, scientific method for the efficient and economic handling of that phase of business from shipper to market. For shipments to or radiating from St. Louis, Long service can lift the burden of Distribution from your shoulders. The Long Warehouse is ready.

S. N. LONG WAREHOUSE
ST. LOUIS... *The City Surrounded by the United States*



MAIN CHANNEL at Los Angeles Harbor with ships, their decks loaded with lend-lease planes, drawn up to one of the Terminal Island piers.

What Shipping Men Want

Ship operators on the Pacific Coast, for the most part, regard Liberty and Victory ships as impractical for profitable postwar use. They want ships that can load and discharge cargo more rapidly to meet railroad competition; better cargo facilities at ports and rearrangement of compartments in cargo vessels so loading may be done simultaneously at bow and stern.

WITH the greater portion of dock, warehouse, transit shed and intra-harbor rail facilities at Los Angeles Harbor at present tied in with the handling of war freight destined for the Pacific battle zones, the Los Angeles Harbor Commission, of necessity, is marking time insofar as active construction work on municipally sponsored port facilities at the city-owned harbor is concerned.

Eugene Overton, president, Los Angeles Harbor Commission, and Arthur Eldridge, general manager of the port, pointed out that while no port enlargement or modernization plans can be undertaken by the commission now because of war conditions under which practically all the facilities at San Pedro and Wilmington are under Army-Navy control, postwar extension of harbor facilities on a major scale is definitely on the commission's agenda. A fund of \$10,000,000 has been accumulated for investment in port improvements as soon as the war situation makes such work possible.

City Buying Waterfrontage

According to Mr. Eldridge, the Los Angeles Harbor Commission anticipates spending between 6 and 10 million dollars to provide new port facilities that will be needed during the first two or three postwar years. With this in mind, the commission has been buying up privately owned water

By FRED A. HERR
Los Angeles Correspondent

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frontage whenever possible during the past three years, to assure a minimum of delay in launching the postwar construction program when hostilities cease.

Los Angeles Harbor as a possible terminus of postwar trans-Pacific cargo planes has also been given consideration by the Harbor commission. These plans, however, it was emphasized, are still in the tentative stage, with no decision reached as yet concerning either the type of cargo plane landing facilities or their location in the inner or outer harbor area. Studies which were initiated over a year ago are still in progress to determine what type of air-cargo seaplane facilities would best serve the postwar needs of the southwestern coastal area for which Los Angeles Harbor is the gateway.

Cargo Seaplane Base

At the adjacent Long Beach Harbor, installation of a seaplane cargo base as an adjunct to surface shipping facilities has been incorporated in a comprehensive postwar port expansion program. Plans for seaplane facilities have reached the stage where

a site for the base has been selected. The Long Beach Harbor Board has plans in its files for a 200-acre seaplane base to be located in the section of Long Beach Harbor known as the South East Basin. The basin was created through the extension of breakwaters under a recently undertaken pier building program involving a cost of three million dollars.

If cargo planes come into the picture after the war, R. R. Shoemaker, chief port engineer at Long Beach, told *DandW*, the harbor commission expects to proceed with its proposal for a seaplane base involving a modern landing area for trans-oceanic cargo planes, base facilities, transit sheds and other equipment necessary for handling air cargo on a large scale.

The movement of cargoes handled over Long Beach municipal wharves for the government resulted in earnings for the city's harbor department of \$350,000 during the first half of the 1944-45 fiscal year, ending December 31, 1944. The department anticipates total earnings for the fiscal year ending June 30, 1945, of \$700,000 to \$800,000, as compared to an income of \$560,000 and a gross revenue of \$282,000 during the 1943-44 fiscal year.

The returns for the first half of the 1944-45 fiscal year gave the Long Beach Harbor Department the largest gross earnings since the establishment of a commercial port at Long Beach

in 1924. The \$350,000 figure, B. W. Tarwater, the department's chief accountant, reported, includes earnings only from actual port operations, such as dockage, storage, demurrage, etc., and includes no royalty income from oil wells located on harbor department land.

Postwar Shipping Plans

In mid-February a DandW representative contacted various shipping company heads in Southern California to ascertain what plans, if any, ship operators have in preparation for the time when private shipping will be resumed.

The survey disclosed a reluctance on the part of shipping firm officials to discuss postwar plans on the asserted ground that such planning would be futile until the government policy with respect to ships has been determined and announced to the industry.

The consensus expressed by representatives of coast-wise operators as well as those engaged (before the war) in trans-Pacific and South American runs, was that any postwar planning by ship concerns must necessarily be held in abeyance until the government discloses what it proposes to do with the maritime fleet and what its policy after the war will be toward private shipping.

Through a number of interviews, opinions were obtained on how ship operators regard the assembly-line cargo carriers produced during the war and how those ships will fit into the peace-time shipping picture.

Some of the opinions are:

1. That the Liberty and Victory ships, as currently designed, are "misfits" insofar as being practical for profitable postwar private use.

2. That the Liberty ships definitely are unsuitable for use after the war because they are too slow, inadequate-



INNER HARBOR area of the Port of Los Angeles, showing Berth No. 160 in the Wilmington district of the harbor.

ly constructed, and insufficiently powered to meet competitive private shipping needs.

3. That the Victory ships, with certain modifications would fit into the postwar scheme to a limited degree; but, as designed now, would probably be passed up by private shipping firms.

A large number of Victory ships, it was pointed out, were built for special war needs, and will require considerable time for conversion into normal freighters. In the case of many Victory ships, it was explained, structural changes that will be needed to make them suitable for competitive private shipping will be so great that the expense of reconverting them probably would not be warranted.

4. That the mere fact a vast number of Victory ships will be available at war's end does not signify that the needs of American ship lines will be met, because, of the rebuilding that will be required, Victory ships probably will figure to a smaller extent in commercial traffic after the war than was anticipated a year or two ago.

Noted, too, in the course of the in-

terviews, was a trend of thought indicating that the shipping industry, as contacted in Southern California, on the whole, would prefer to build an entirely new cargo fleet after the war rather than be compelled, or urged, by the government to take over types like the Victory and Liberty ship.

Prefer New Cargo Fleet

The point was advanced that if shipping firms are permitted to build new postwar ships, they could be designed to meet specific cargo carrying needs, the net result of which would be that more efficient ships would be carrying the American flag than if Victory ships had to be rebuilt to postwar requirements.

Other opinions obtained by DandW's survey were:

That the shipping industry would like to be left alone by the government insofar as "regulation" is concerned, with no more control exercised over water carriers than is given rail carriers.

That the prewar subsidy for ship builders will need to be re-instated after the war if American lines operating in trans-oceanic traffic are to compete successfully with foreign lines.

That the present sale price of ships must be reduced at least 50 per cent to make the ships practical for profitable operation in intercoastal traffic.

What Shipping Men Want

Some thoughts also were advanced on what ship line operators "would like to see come about after the war" in ship design and cargo handling facilities at ports.

Ship operators seem to want:

1. Ships that can load and discharge cargo more rapidly to meet railroad competition.

2. Better cargo handling facilities at ports.

3. Winches that operate faster than present equipment.

4. Re-arrangement of compartments in cargo vessels to enable the loading of a ship to proceed simultaneously at bow and stern.

Liberty Ships as Tramps

A more optimistic view of the part Liberty ships will play in postwar shipping on the west coast is held by

PORT OF LONG BEACH, which, with the adjacent Port of Los Angeles, constitutes Los Angeles-Long Beach Harbor. The view here is north along Pier A, showing (R) the modern type of transit shed which was completed shortly before the war. In the distance may be seen some of the derricks of oil wells drilled on land owned by the Long Beach Harbor Department, which annually yield several million dollars in petroleum royalties for harbor development.



Our Merchant Marine

The Victory Ship



The Victory, new streamlined partner of the Liberty ship, is our latest maritime achievement.

The Victory ship has one more deck than the Liberty and is longer, broader and faster.



LENGTH 455 FEET, BEAM 62 FEET, DEADWEIGHT TONNAGE 10,800, DECKS 3, HORSE POWER 6,000. SPEED 15 KNOTS PLUS.

A hundred of the new vessels have been named in honor of representative American communities.

The backbone of America's post-war Merchant Marine will be a vast fleet of Victory ships flying the Stars and Stripes on every Sea.



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Walter A. Radius, economist in the new shipping division of the U. S. Department of State. In his recently published book, "United States Shipping in Trans-Pacific Trade," Mr. Radius presented a study of trans-Pacific trade conditions and shipping for the years 1922 to 1938.

He stated that tramp ship service is an indicated need as an aid to achieving shipping efficiency on the west coast because of a lack of balanced cargoes.

"Low-value bulky commodities cannot be carried efficiently in liner services," Mr. Radius stated. "Unbal-

anced trade can be carried by a two-way liner service only if the operator or his financial backer, the Government, is willing to pay the costs of the return trip with empty holds. To meet the complete demands of the trade, shipping services must include the irregular tramp services.

"At the close of the present conflict the United States will own a huge fleet of slow cargo carriers—the Liberty ships. These vessels could undoubtedly be employed more efficiently in irregular trades than as liners competing with faster vessels."

Lumber Supply 17% Lower Than Last Year

LUMBER authorized for distribution in the second quarter of 1945 totals 7,762,000,000 bd. ft., plus a contingency reserve of 738,000,000 bd. ft., the War Production Board has announced. Production for the second quarter is expected to be approximately 12 per cent lower than

normal output for that period, and a rise in military requirements is anticipated, WPB said.

This situation has made it necessary to withhold 10 per cent from all allotments that are under accounting control in order to establish a contingency reserve to take care of any

additional direct and indirect military needs, and to offset further decrease in production, which may be as great as an additional 5 per cent. Early in April the lumber supply-requirements situation will be reviewed and authorizations will be issued from the contingency reserve if the over-all position permits, the WPB Requirements Committee indicated.

"The current lumber situation is marked by a greater tightness in supply than any previously experienced, with no improvement in sight," J. Philip Boyd, director of the Lumber and Lumber Products Division said, outlining factors that had to be taken into consideration in making second quarter allotments.

Lumber supply for the first quarter of 1945 is estimated at nearly 17 per cent below that of a year ago, he said. The drop in production is due to increased difficulties in obtaining logging and transportation equipment, shortage of manpower and tires, unusually bad weather in three major producing regions, and a general let-down of effort last fall when it was

New Shipping Records

With the movement of more than 25,000,000 tons of dry cargo and 12,750,000 tons of bulk liquid cargo from the Atlantic seaboard during 1944, all records of shipments from Atlantic Coast ports previously established were excelled.

The figures on dry cargo shipments represented a 70 per cent increase over the previous record year of 1943. Ship sailings rose from 3,148 in 1943 to 4,868 as more and more supplies were dispatched to the battlefronts.

generally felt that the end of the European war was in sight.

Stocks have declined from about 18,000,000,000 bd. ft. in mills and distribution yards just before Pearl Harbor to about 6,000,000,000 bd. ft. Present stocks are widely scattered and are made up largely of grades, species and sizes not adaptable to war use. To a greater extent than ever before, the lumber needs of the war must be met from current production.

Allocable lumber supply for the second quarter of 1945 is now estimated at 7,650,000,000 bd. ft., or 89 per cent of supply in the second quarter of 1944, which was 8,601,000,000 bd. ft.

Navy Contract

Charles K. Spaulding Logging Co. of Dallas, Tex., and McMinville, Ore., has been awarded a contract of \$805,000 by Great Lakes Steel Corporation to construct wooden frames for Navy huts. The plant will handle more than 45,000 ft. of lumber every eight hours, machining it to a pattern and painting it. The huts, for overseas, are of quonset type 20 x 48 ft. and each will accommodate 40 men. Floors are plywood, with the remainder steel. Contracts for bulkheads have been given to other firms. (Haskell)

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LEDERER TERMINALS

have something in store for You ⚓



⚓ LOCATION,—

On the lakefront at the foot of East 9th Street, three blocks from the heart of City. No obstructions, no bridges, no river to navigate, —no use for tugs.

⚓ FACILITIES,—

One thousand feet of concrete dockage with New York Central siding and reciprocal switching. Ample truck platforms. Modern warehouse space at the dock for direct movement of package freight to or from boat to house or cars, also inland warehouses to meet every requirement. Spacious waiting rooms and terminal facilities convenient for cruise and passenger ship service, with restaurant, office and showrooms in connection.

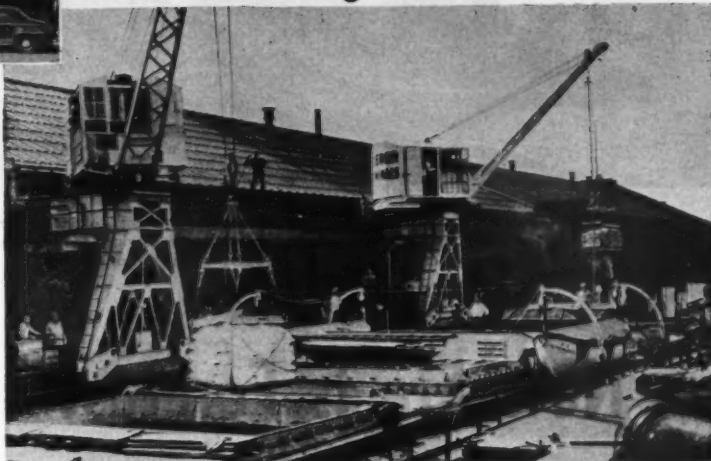
⚓ EQUIPMENT,—

Electric traveling gantry and gasoline crawler cranes as well as completely motorized (tractor trailer) equipment and mechanized work trucks for fast and efficient handling of any type of top or side hatch vessels.

⚓ PERSONNEL,—

LEDERER TRAINED with the same degree of care and thought that has made this organization outstanding in the field of stevedoring and warehousing.

See our advertisement under Buffalo, N. Y., page 113



THE LEDERER TERMINAL WAREHOUSE Co.

GENERAL OFFICES: LEDERER TERMINAL BUILDING

FOOT OF EAST NINTH ST., CLEVELAND, OHIO



The war interrupted commerce on the Missouri to Omaha but with a 6 ft. channel, a move to deepen it 3 ft. and a campaign for postwar commercial barge service, this stream will provide Omaha a new outlet for products of the area.

New Era Is Forecast On 'Old Muddy'

Because of legislation that has passed Congress and the increased interest in Missouri River flood control and navigation people living in the Missouri River Basin feel they are living on the brink of a new era, and that "Old Muddy" will assume its rightful place once more as an outlet for the products of the land through which it flows.

By GRIER LOWRY

• • •

A CENTURY ago, the 2,500-mile "Old Muddy" was a main artery of steamboat travel to the West. In 1858, sixty packets carried settlers inland, and traffic on the river boomed. Railroads ended that era, though attempts frequently have been made to revive traffic on the river.

But people of the Middle West feel that measures already passed by the Government, and measures before Congress mean that the Missouri again will become a mighty force in transportation. Today, these people feel they are living on the brink of a new era and that the Missouri once more will assume its rightful place as an outlet for the products of the land through which it flows. The river has already made an important contribution to the war effort by moving heavy freight, and relieving the over-burdened railroads.

One of those who favor developing the potential navigation possibilities

of the Missouri to the utmost is Brig. Gen. R. C. Crawford, Omaha Division Engineer for the War Department. He believes that after the war, traffic on the Missouri will be greater than in the days before the river boats had not been replaced by the railroads.

"Traffic would be heavy on the River now," contends Brig. Gen. Crawford, "if it weren't for the war. We need cheap transportation for full development of the area after the war. I am also looking forward to the end of the war and completion of the U. S. Engineer's job of bringing the river under control, eliminating disastrous floods."

Gen. Pick and "Old Muddy"

One of the outstanding agents for good in developing the navigation possibilities and in supervising construction of levees and other devices to control the river, is Brig. Gen. Lewis

A. Pick, now building the Ledo Road that will link the Calcutta Railhead of Ledo in India with China. Pick's Plan, so widely heralded, is basically the Flood Control Bill, passed by the last session of Congress. According to *Time*, which reported the magnificent job Pick is doing on the Ledo Road, his "heart still was in the Missouri River basin of the United States."

There has never been a man who toiled more diligently to control "Old Muddy's" rampant ways than Gen. Pick. "Why not fight floods?" he asked. "Why not control and utilize the Missouri's water? Erect dams at strategic points and create reservoirs to absorb excess waters, then release them during dry periods for navigation and irrigation. Have a complete system of flood and water utilization."

The hard-working, persuasive, gray-haired army officer in three months produced a report based on 50 years of surveys in the Missouri Basin. He sold his plan to Chambers of Commerce up and down the river, his infectious personality became well known to officials of Mid-Western cities; he became advisor to governors in the nine-state Missouri Basin. He wants nothing more than to return, after the all clear signal sounds, to the task of taking "Old Muddy" in hand.

Flood Control

Passage of the 400-million dollar Flood Control Bill meant authorization for projects that will require months of planning a great series of dams that will be constructed to impound water, levees and flood walls and help irrigate arid lands. Farmers were happy to see this bill pass Congress because the great upstream reservoirs should mean the end to the frequent inundations that ruined their crops year after year.

Although passage of the measure releases no money for immediate development, it puts the project on the approved list of postwar works, and already army engineers of the Reclamation Bureau are at work on the details of the project. It will probably take at least 20 years to complete the projects outlined in the Flood Control Bill.

A 9-Ft. Channel

The Bill that wasn't passed during the last session of Congress, but which has been approved by the present session, is the 500-million dollar Rivers and Harbors Bill, that carries a 9-ft. channel provision that is of such a high degree of importance to navigation on Missouri River. However, this bill was less urgent than the Flood Control Bill that means the construction of dams to assure adequate flow of river water to float barges throughout the open season.

The Rivers and Harbors Bill provides a 9-ft. channel as far north as Sioux City. The 9-ft. channel is already about 95 per cent complete, but a 9-ft. channel all of the way, free from bottlenecks, is necessary to realize the opportunities of the river.

(Continued on page 103)

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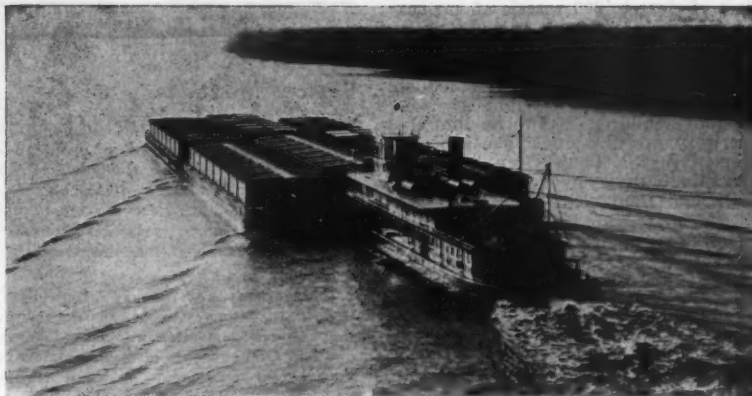
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The \$1,000,000 "Gona," one of six towboats built for the Defense Plant Corp. by the St. Louis Shipbuilding and Steel Co., St. Louis, Mo., on a "shake-down" cruise on the Mississippi River, following her launching.



Towboat on the Mississippi.

Army Engineers Photo

ONE of the unheralded feats of World War II is the capable job the U. S. Army Engineers of the St. Louis District are doing in controlling the unruly waters of the Mississippi River in spite of the additional war-time duties the Corps has assumed.

In war and in peace, the Engineer Corps is the unglamorous workhorse of the army. U. S. Engineers build, maintain and control, year in and year out, but only occasionally do their activities catch the public eye. Most of their work is unknown, unsung, although the Corps renders an invaluable service. You hear of the Engineers when they undertake tremendous jobs, such as the Panama Canal or the Alcan Highway, but, too infrequently, do you hear of such activities as the saving of property and human lives when the Mississippi breaks loose and floods the countryside.

Lee's Dikes

For 109 years, since 1836, when Lt. Robert E. Lee was dispatched to St. Louis to study the river channel, the Corps has had a representative there. Then, the Mississippi was moving away from St. Louis, and Lee was ordered to plan and construct dikes that would prevent St. Louis from becoming an inland town. Dikes constructed at Venice, Ill., and Bloody Island eliminated this possibility, and the river channel remained there. So did the Engineers' office.

The Mississippi is a capricious river and it is a many-sided task to keep the channel constant. But the Army Engineers do this and more. They fight floods, construct and maintain dams and locks, carry out military construction, dredge channels, maintain a regular river patrol and carry on the detailed work of administrating procurement contracts.

Present duties of the Office of the District Engineer are divided into three classifications:

1. River and harbor control, includ-

ing flood control, flood fighting, construction and maintenance of dams and locks.

2. Administration of procurement contracts for engineer troop requirements from firms in this area.

3. Military construction.

Flood Fighters under the direction of the St. Louis District Engineer fighting high water at Meredosia, Ill.

Army Engineers Photo



A Capricious River

St. Louis District Engineer Corps employs 1,200 people, maintains a

U. S. Dredge "Grafton." In carrying on river work, the Engineers Corps maintains a sizable "task force" which includes 6 dredges.

Army Engineers Photo



fleet of close to 200 vessels of various sizes, is responsible for the behavior of the Mississippi for a stretch of 300 miles, from the mouth of the Ohio River at Cairo, Ill., to Mile 300 at Clemens Station, Mo. All of the Mississippi's children that drain into the territory are also under the supervision of the St. Louis office, including the Illinois River up to the La Grange Lock and Dam.

The Mississippi is a capricious river and it is a many-sided task to keep the channel constant. A shifting channel requires marking a new channel by the Corps until the Coast Guard can install navigation aids. Navigation dangers on the river are materially lessened by the diligence of the Engineer's staff in keeping the channel free of all sorts of obstructions such as boat wreckage, overboard cargo, debris from fallen bridges and sunken logs.

Islands of Sunken Boats

Patrols constantly run the river, locating and removing obstacles. The numerous "towheads" or small islands, that dot the Mississippi were started by the wreckage of old paddle-wheelers, and many bear the names of the boats which gave them birth. Many of the river islands began to form immediately after the Civil War when numerous boats were sunk during hostilities. Today, the Engineers dredge and remove new debris on the river's bottom before silt is deposited, thereby preventing new formations from starting.

Maintenance of the 9-ft. channel for the 300 river miles the Engineers oversee requires construction of regulating dikes, stabilization of banks and the dredging of shallow bars. The Corps also operates dams and locks. The locks, 110 ft. in width and 600 ft. in length, accommodate small ocean going vessels. The 9-ft. channel allows wartime boats to move on down to the sea.

Floods and Levees

The war temporarily forced abandonment of the extensive levee con-

Shippers Advisory Boards Cancel Meetings

In compliance with the wishes of the Office of Defense Transportation, and in line with the approval of the Contact Committee of the National Assn. of Shippers Advisory Boards, it has been concluded that the scheduled Spring general meetings of all Boards throughout the country will be cancelled.

This decision was reached after discussion and consideration of the matter by the Contact Committee with Col. Johnson, director, ODT, because of the seriousness of the present emergency in transportation and hotel facilities.

struction program which was getting under way on the Mississippi, but when the all-clear signal sounds, the work will be resumed on a still larger scale.

Work of the Corps of Engineers during the 1943 and 1944 floods was of primary importance in keeping flood devastation at the lowest possible minimum. When the Mississippi threatened to run rampant during these years, the Corps of Engineers was ready to cope with the runaway river. A 24-hour message center was set up in the Office of the Engineers in the Federal Building. Seven sub-offices were installed at strategic spots on the river and these were equipped for immediate communication with headquarters. There was a supply center for the flood fights, with everything in readiness for prompt handling of equipment, servicing of boats and providing for necessities of the personnel.

Flood of 1944

Radio equipment, walkie-talkies, runners, telephone and telegraph were utilized to keep St. Louis and local headquarters informed concerning threatened breaks in the levee, warn-

ing of imminent destruction of livestock and property. Radio networks were used to broadcast warnings to threatened areas.

Ten thousand troops, 800 war prisoners and hundreds of civilians helped fight the 1944 flood; 3,000,000 sandbags were thrown on levee breaks to keep the water back. Although 250,000 acres of land were inundated during the 1944 flood, the damage would have been much greater if it had not been for the tireless, 24-hour activities of the engineers in curbing the river waters.

Postwar Work

The Engineers maintain two fleets of river boats, a "task force" that includes 6 dredges, 2 towboats, 5 tenders, 8 pushboats, 19 motorboats, 51 barges, and 100 flatboats and pontoon boats, as well as numerous auxiliary craft.

The St. Louis District of the Corps of Engineers is under the command of Col. Lawrence B. Feagin, who succeeded Col. Roy W. Grower in 1942. Col. Grower has since been promoted to Brig. Gen. and is with Engineer troops in France.

Already, the St. Louis District Engineer is planning postwar work in flood control, is studying possibilities in the field at the direction of Congress. Navigation improvements are being planned with the possibilities of an eventual 12-ft. channel from New Orleans being investigated.

Locks and Dams

It is pretty generally known that the Mississippi tributaries, particularly the Ohio, flow down hill to such an extent that before the canalization program they were extremely unreliable in dry weather. The Ohio, main feeder of the system, descends 429 ft. between Pittsburgh and its confluence with the Mississippi at Cairo. By checking these descents with locks and dams, properly placed, the Army engineers have provided what has been called a liquid stairway to and from the sea. With an emergency value that has been proved and a steady long term peacetime value these improved waterways should come in for more general recognition as soon as the war is over.

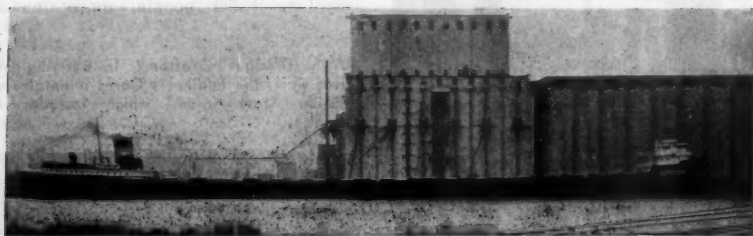
Huge Tows

The locks on the Ohio River are the same size as the locks in the Panama Canal, 600 ft. long by 110 ft. wide. They permit the passage of long tow, many longer than the famous Cunard liner the "Queen Mary."

It should be remembered that before 1929 river transportation was more or less of a hit or miss affair. Since then, however, with a regular dependable channel to work on, the river operators have brought about many improvements in their equipment and terminal facilities that cannot help but advance waterways traffic in the years to come.

The Army engineers have been vindicated in their advocacy of continual improvements on inland waterways. War has demonstrated in many ways how right they were! (Lowry)

"Largest Freighter"



THE STEAMER J. BURTON AYRES, said to be the largest freighter ever to enter Milwaukee Harbor, pictured here when loaded with 450,000 bu. of wheat, has about 14,850 tons capacity. Its length is 630 ft. overall; keel, 595 ft.; beam, 60 ft. It is one of the newest freighters plying the Great Lakes, having been completed in 1943. It is owned by the Great Lakes Shipbuilding Co., Cleveland, O. (Hubel)

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ON THE BANKS OF THE OHIO



America's most modern River — Rail — Truck Terminal and Warehouse located only sixty miles from the center of the country's population, is served by six railroads, many motor freight lines, five barge lines and all Ohio River independent towing operations.

Unusual facilities provide for economical storage and efficient distribution of merchandise and food commodities to and from world-wide ports.

Note these advantages offered by Mead Johnson Terminal Corp., at Evansville, Ind.: Fire Resistant building. Carload facilities. Motor Freight Terminal. Ninety thousand

sq. ft. on one floor (no floor load limit). Fully sprinklered. A.D.T. watch service. Insurance rate 14.7c per \$100.00 valuation. Car spotting capacity of 64 cars simultaneously, plus sixteen double doors to facilitate loading and unloading motor trucks. Two high-speed 52 ft. span 10-ton capacity travelling overhead electric cranes. Electric lift trucks with skid platforms.

A free booklet describes these many services which include a unique accounting system, stencilling, recoopering, reconditioning and automatic label service for canners requiring private labels affixed at warehouse. Send for your copy now.

MEAD JOHNSON TERMINAL CORP.
EVANSVILLE, INDIANA

"Where Waterway .. Railway .. Highway Meet"

When writing advertisers please mention D and W

D and W, April, 1945—33

Adapting the Steamer To the Cargo

In the case of merchant vessels the emphasis should be placed on the type of cargoes they are to carry, and the most economical and efficient means of accomplishing this objective, so important to the shipper. It is of little avail, even though the charge per ton of cargo by steamship carrier is low, if other factors incidental to loading, handling, stowage, unloading and reshipment by other means of transport have not been carefully considered to avoid losses in connection with the cargo itself.

By W. CLIFFORD SHIELDS, Jr.
*Vice President
American-South African Line, Inc.*

• • •

WAREHOUSING and transportation are closely linked together, particularly in overseas commerce. An important function of each of these agencies is to promote the trades upon which they as well as their shippers and consignees depend for their existence.

The steamship company has the assignment of providing for economic and efficient transportation of goods from the port nearest the shipper to the destination port closest to the consignee. In addition, its services must be blended in with those of other carriers such as railways and trucks. Only as this coordination occurs, do goods move on an all-around sound basis and contribute to the benefit of people everywhere.

The proper approach is not one of emphasis on the medium of transport as such, but on the one most suitable for a particular purpose. In the case of the steamer, emphasis should be placed on the type of cargo it is to carry, and the most economic and efficient means of accomplishing this objective so important to the shipper.

Importance of Handling

It is of little avail, even though the charge per ton of cargo by steamship carrier is low if other factors incidental to loading, handling, stowage, unloading and reshipment by other means of transport have not been carefully provided for to avoid losses in connection with the cargo itself.

Consequently, the steamship company must be on the look-out for improved methods for careful handling of merchandise in the loading and discharge of its ships and to provide suitable types of cargo gear for use at its piers as new types of packages and containers are developed.

In the express cargo-passenger ships which are planned for operation in the postwar period, special provision will be made for the care of cargo, to insure safe and satisfactory outturn.

Cargo Care

One of the distinctive records of merchant shipping was recently achieved by the S. S. "African Sun" of the American South African Line. It was not a dramatic performance of salvage, not a spectacular navigational feat, but a steady and accurate control of the ventilation and moisture in the ship's holds by its cargocaire system for two years.

This vessel was delivered to Ameri-

can South African Line by the Federal Shipbuilding & Dry Dock Co. in Dec., 1942. Since that date, the ship has made eight voyages, 16 legs, to ports around the globe. Logically, the routes and ports of call remain within the files of military security. It can be stated, however, that the "African Sun" crossed both the North and South Atlantic, traversed the Mediterranean and Red Seas, and plied the Pacific and Indian Oceans. In fact, the ship rounded Cape of Good Hope four times and made two passages through the Straits of Magellan. In all of these voyages, the vessel encountered wide variations in temperatures and humidity, which were recorded and controlled carefully by its cargocaire equipment.

Unique Standard Set

On the outward voyages from the United States, the ship carried mainly military and lend-lease cargoes. On the homeward legs, the shipments embraced many items on the strategic list and products not available in this country—tea, rubber, cinnamon, dill and celery seeds, tanning extracts, wool, skins and hides. These and other cargoes carried are susceptible to damages during these long ocean hauls.

From the economic aspect of shipping, the S. S. "African Sun" has set a unique standard for ocean-borne transport. During the two years of its operation, every outturn of cargo has shown no trace of rust, rot, discoloration nor other forms of moisture damage. This suppression of all "sweat damage" by diligent supervision by the ship's personnel of its cargocaire system gives promise to exporters and importers of the service that many American merchant vessels will render in peace-time.

Cargo Spaces

The cargocaire system may be construed as air conditioning of vessel's cargo spaces. It provides for ventilation and recirculation, dehumidification and recording instruments, it com-

Cargo on dock showing discharge of moisture by evaporation



prises an air drying unit centrally located, a fan and duct system complete and independent within each cargo hold and supervising instruments for the cargo holds and the atmosphere.

The system ventilates with outside air when the atmospheric dew point is lower than the dew point in the hold, and weather permits; it also recirculates the air in the holds and injects dry air from air-drying unit at all other times.

The air from the drying unit displaces an equal amount of wet air from the hold, reducing the moisture content and consequently the dew point.

Protects Cargo

The principal objective so important in rendering economic and efficient steamship transport is the protection of cargo while in transit from shipper to consignee independently of weather conditions.

Ventilation in the ship's holds is vitally important in connection with various kinds of cargo. There are products of which the quality can be adversely affected by impure air. Certain commodities exhume vapors which in turn may tend to deteriorate other products in the same hold. Oils and many edibles are subject to these damages unless ventilation is provided in the holds of the ship. Avoidance of losses from this source cannot but help but make for more beneficial commerce from viewpoints of all component groups and result in direct advantages in prices to final consumers everywhere.

The Dew Point

Need for dehumidification in ships holds shows itself with many types of goods. It must be recognized that the temperature below which air begins to deposit its moisture is called the dew point and is the most important single factor to remember in preventing damage by condensation.

Just as soon as a ship's hull cools below the dew point of the contacting air in the holds, condensation of moisture from that air will form on the structure, which it corrodes and whence it may drip onto the cargo as ship sweat. Such moisture gets into the air of the hold principally by way of evaporation from the internal free or hygroscopic moisture of the cargo.

Another common form of condensation is called cargo sweat. This is moisture deposited from high dew-

point air coming in contact with cold cargo. The cargo is cold when loaded and, as the ship sails into warm tropical weather, high dew-point air is often erroneously forced into the ship's holds by natural or mechanical ventilation. Moisture may also have had time to evaporate from damp cargo or the bilges in the small hold.

Moisture in Cargo

Internal moisture in cargo is generally carried aboard as hygroscopic moisture; that is, in air-dry grain, lumber, hides, cartons, textiles, coffee, dunnage, etc., all of which will absorb moisture from or evaporate moisture into the contacting air, depending on relative vapor pressures. If this type of cargo warms up during the voyage, some of this moisture may be released into the cargo space where it will come in contact with the cold structure of the ship or with cold cargo with damaging results. While this hygroscopic condition is, indeed, an "inherent vice" of the cargo it need not cause damage if



Corrosion on steel pipes caused by sweat.

the released moisture is removed rapidly enough.

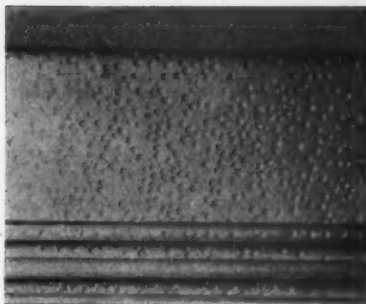
Much other moisture is carried aboard by cargo previously wetted rain, snow, fresh or salt water.

Control of Moisture

With moisture developing from so many sources, its control becomes a major task in order to assure satisfactory delivery of goods with minimum deleterious effects from mold and rust on cartons of labels on packages and actual quality of merchandise of all kinds subject to damage by water condensation.

The recording charts will also serve as evidence of performance by steamship operators and remove cause for many claims that arise from inadequate controls of atmospheric conditions in the ship's holds in the past.

The system devised by Cargocaire Engineering Corp. of New York, should take away much of the hazard incidental to cargo handling by steamship operators and put these services on a most attractive basis from the viewpoint of shippers and consignees and final consumers as well.



Sweat formed on pipes and bulkhead in ship's hold.

The cargocaire system will be installed in all of the postwar vessels of the American South African Lines, Inc. In addition, lockers will be built into these ships from carriage of valuable merchandise.

Block-Stowage

The usual practise in many overseas trades has been to use small packages for broken stowage, which is to say, small packages are used to fill in the spaces between large cases and to utilize the space between the beams. This practise has a tendency to slow down delivery on the dock, since it has been necessary to accumulate in one pile the various packages shipped as one lot but stowed in different parts of the ship's compartment.

After the war, in order to provide a more speedy delivery to the consignee, the American South African Line will put block-stowage into effect. This means that each lot of cargo will be stowed separately in the ship and will be discharged at one time, as one parcel, ready for immediate delivery to the consignee.

Postwar Ships

The new postwar vessels will have facilities for carrying special types of cargo. For example, deep tanks will be provided for the carriage of bulk liquid cargoes. Refrigerator space, consisting of a number of separate compartments, each capable of being maintained at a required temperature, will be provided. Recording thermometers and other provisions of the United States Department of Agriculture will be provided for such specialized trade as the carriage of South African grapes. The refrigerator compartments in the ships will be suited, in every respect, for the carriage of ordinary commercial cargo requiring refrigeration, such as apples and other deciduous fruits; meats, fish and quick frozen foods; biologicals, and other commodities.

Through these new methods and types of equipment, the American South African Line will not only provide speedy transport with its express ships between two continents but will assure safe handling and safe carriage of goods to achieve general satisfaction to all concerned in business transactions in which transport is an important element.

There are other tasks, in which the

Moisture damage to sacks caused by sweat dripping from overhead.



cooperation is essential not so much on the part of steamship operators, but of shippers, consignees and warehousemen, if overseas commerce is to be developed to its utmost with benefit to all groups.

Warehouse Displays

Imports warrant as much consideration, if not more than exports. For example, South Africa and East Africa send to the United States; asbestos, cashew nuts, cloves, coffee, extract, chrome ore, mica, mohair, pyrethrum, sisal, wattle bark, wattle bark extract and many other commodities that lend themselves to dis-

play for the purpose of sales promotion. If those interested in warehousing and distribution, especially in important trade centers, whether at a port on the sea-board or at an important inland manufacturing center, could arrange displays of samples of these products, it would undoubtedly stimulate trade. Some warehouses have already indicated an interest in such a proposal for the post-war period. Undoubtedly the cooperation of municipalities or civic organizations, such as Chambers of Commerce and foreign trade clubs, could readily be stimulated in such an exhibition of South African and East African products.

For example, 25 lb. of asbestos or 10 lb. of Zanzibar cloves might be ample for display purposes but behind these display samples there might be 15 tons or 10 tons of each commodity, in warehouses ready for distribution to manufacturers interested in buying sample lots for experimental use.

Commodity Approach

It is then by commodity approaches whether in supply, transport, warehousing or any other step in distribution that the best solution to a sound and sizable world trade will be found.

Stevedore Shortage Solved By Servicemen

Threatened tie-up of vital war cargoes on Pacific Coast docks because of civilian manpower shortage has been relieved materially by servicemen on furlough, which forms one of the most interesting stories in freight handling that has come out of the present war.

WHEN the advancement of Los Angeles Harbor from a sub-port of San Francisco to a primary port of embarkation for war freight was made early in 1944, the stepped up movement of cargo to meet the accelerated demands of the Pacific battle areas created an acute strain on the supply of stevedores in the San Pedro, Wilmington and Long Beach areas of the Los Angeles-Long Beach Harbor District.

How this problem was alleviated when the shortage of civilian manpower threatened to tie-up war cargoes on the docks for lack of longshoremen to move the freight aboard ships forms one of the interesting stories in the realm of waterfreight handling that has come out of World War II.

Superb Cooperation

It is a story of superb cooperation between members of the armed forces, civilian stevedores, longshoremen and warehousemen unions and the U. S. Employment Service; a story of army and navy enlisted men, lieutenants, flight officers and even officers of higher rank, on furlough or leave, pitching in at the side of civilian longshoremen to get the war freight aboard the waiting ships.

Piers at Los Angeles Harbor, and at the adjacent Port of Long Beach, in recent months presented a unique picture in which a hodge-podge of servicemen in uniform and merchant mariners labored with stevedores and longshoremen to load the holds of war supply ships.

In 1944 servicemen during periods of leave labored 500,000 manhours on

the docks of Los Angeles-Long Beach Harbor loading ships with warbound cargo. It is estimated that they earned in excess of one million dollars in pay for this off-duty work.

The casual labor office of the U. S. Employment Service at San Pedro, the International Longshoremen and Warehousemen's Union, and the Waterfront Employers' Assn. are credited with uncovering this source of labor and jointly working out an effective plan for employing servicemen on "spot" jobs as longshoremen and general dock workers.

Servicemen doing stevedoring at Los Angeles Harbor fall into three categories: those stationed locally who devote off hours to this work to earn side money; servicemen on three-day pass; merchant seamen temporarily "on the beach," who do day-to-day stevedoring to defray expenses while waiting to sign up on another ship.

Casual Labor Pool

The 60 harbor district members of the Waterfront Employers' Assn. have found this casual labor pool acts as a cushion when essential war work snows under the regular longshoremen crews.

Casual laborers, in the form of servicemen on leave, or off-duty from local posts, are called in only when civilian union workers are unavailable to fill requirements. When a waterfront employer's request for dock workers cannot be filled by the union, the union official transfers the request to the U. S. Employment Service in San Pedro.

The USES office opens at 6 a.m. and 4 p.m. week days. Privates, cor-

porals, sergeants, seamen, commissioned officers are part of the throng that usually awaits the opening of the doors. The office uses the "plug board" assignment system which the longshoremen's organization has found practical.

Each man upon entering the USES office is issued a wooden plug with his waterfront number attached. The position of the plug in the board indicates to whom the next available job is to be assigned.

Dockmen-Checkers

Skilled jobs, such as hatch tenders, winch drivers, headmen and lift jitney drivers, usually are filled by experienced civilian waterfront workers. Servicemen usually are assigned work as warehousemen, dockmen, holdmen, lashers or checkers.

The soldier-sailor workers receive the same pay as union men: \$1.10 per hour by day; \$1.65 by night. Some jobs, like shoveling, pay 30c. an hour above the regular scale. Bonuses are paid on jobs entailing a measure of hazard, such as unloading a ship from the South Pacific that might be infected with disease fungi.

Navy casuals have carried their San Pedro work plug with them around the world. The USES has record of a merchant seaman who helped load a ship at San Pedro and then sailed on it to Salerno, Italy, where he was immobilized two days under German Stuka attack. He showed up at the casual labor office in San Pedro 7 months later with his job plug, looking for another work assignment on the waterfront. (Herr)



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Tough jobs are our specialty. Lake and Inland Warehouses with rail sidings, and truck platforms—all amply equipped to make your handling and storage problem simple. Four Locomotive cranes with buckets, and magnets for handling heavy steel or bulk commodities. Warehouses equipped with tractors, two and four-wheel trucks, and high-lift equipment for all types of merchandise up to 10,000 lb. lifts.

In Cleveland—two lake front warehouses (Docks 20 and 22) each with 20-car spotting capacity, together with water depth for lake steamers. Large truck platforms. Floor loads unlimited. Served by PRR.

Inland Warehouses — Juniata, Kinsman and Consolidated. All fireproof. PRR private siding at Juniata. NYC private siding at Kinsman and Consolidated. Write for detailed information.

Incorporated 1911



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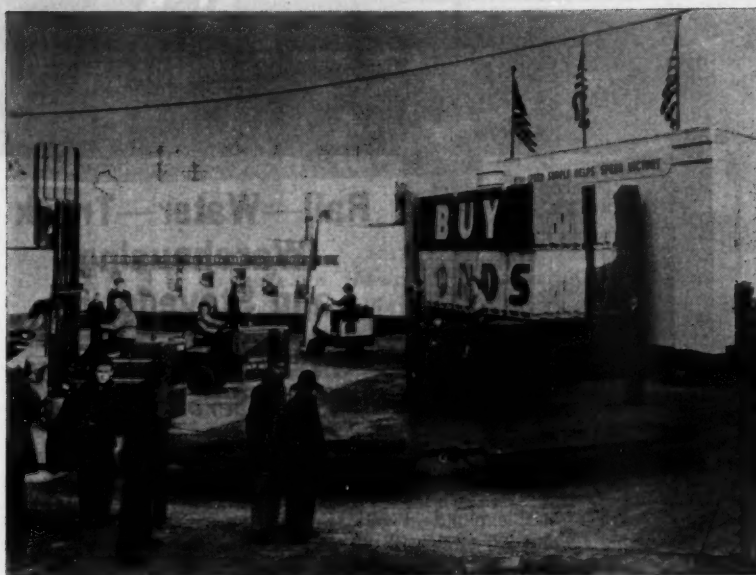
Dock 22, Foot of W. 9th St.
CLEVELAND OHIO

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D and W, April, 1945—37

Advantages of Palletized Unit Loads Demonstrated at Navy Exhibit

Conclusive evidence that strapped unit loads protect supplies against damage was demonstrated at recent Navy's war loan exhibit at Chicago, where a series of time studies determined that one fork truck operator could remove 15 pallet loads from a trailer train and stack them in eight minutes.



Fork trucks and tractor trailer train used at exhibit.

IN a demonstration of palletized unit load handling at the Navy's Sixth War Loan Exhibit at Chicago, 15 unit loads of canned provisions were moved over 1,000 times each by fork truck without damage to the contents. The demonstration was conducted by the Field Operations Branch of the Navy's Bureau of Supplies and Accounts, to acquaint the public with the advantages of the unit load system of materials handling now in effect at all naval activities.

The immense growth of the Navy's program for palletized unit load shipments of all supplies adaptable to palletization, has followed the success of initial studies and experiments which proved the efficiency of the palletized unit load method in saving man hours, time and materials for speeding shipments from contractors' plants to advance bases.

Equipment Used

From noon until 10 p. m. for over two weeks, the pallets were constantly transferred from three-tier storage to tractor trailer train and restacked by fork truck after a short circuitous

haul. The fork trucks and tractor used in the demonstration were both of gas and electric type. The trailer train was made up of 48 in. x 108 in. flat bed, caster steer, Navy trailers. A large part of the time, the outdoor demonstration was carried on in temperatures below freezing. The tractors and fork trucks operated on concrete and asphalt surfaces.

Each one-and-one-quarter-ton palletized unit load consisted of 48 fiber-board cases of No. 10 can provisions, strapped with six $\frac{1}{4}$ in. x .035 in. straps and edge protectors to a Standard Navy 48 in. x 48 in. hardwood pallet with recessed outer stringers.

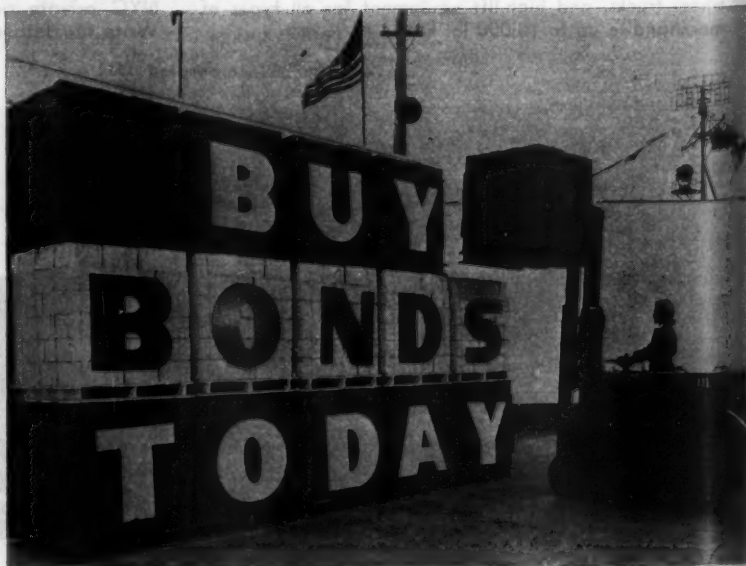
3,000,000 Persons

To dramatize the exhibition, the unit loads were painted red, white, or blue, and large letters fastened to the strapping, on the front face. When completely stacked, the fifteen unit loads spelled out "Buy Bonds Today," resembling gigantic children's blocks.

Over 3,000,000 persons were clocked through the gates of the Chicago Navy Exhibition, most of whom viewed the palletized unit load handling exhibit.

Over a public address system, Navy personnel explained the fork truck and pallet system as the demonstration progressed and in addition described the handling of unit loads by other materials handling equipment.

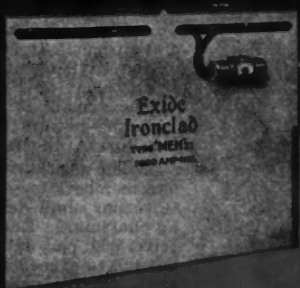
(Continued on page 80)



Stacking palletized unit loads.

EXIDE POWER
Picks them up and packs them away
as easily as you can lift a finger

POWER



Exide
BATTERIES

IN mills, factories and warehouses, unnumbered electric industrial trucks—powered by Exides—are lifting, hauling and stacking unit loads—helping to speed up production, to cut materials handling costs, to conserve vital manpower.

That so many Exide Batteries are employed in this important service, is due to three factors: Exides have the extra power needed to stand the heavy strain; their rugged construction keeps them on the job with minimum attention; and their ample reserves assure sustained speeds throughout each shift. You can always count on Exides for dependability, long-life and ease of maintenance.

Write us for a FREE copy of the bulletin "Unit Loads," prepared by The Electric Industrial Truck Association. It tells how to cut handling costs up to 50%... covers latest developments in materials handling... and includes actual case histories.

Ambitious Program Proposed For Port of Boston

Comprehensive program is outlined in pending bill in Massachusetts Legislature for new port authority, acquisition of property, construction of new piers and consolidation of port facilities on new and practical basis.

By C. F. WELLINGTON

AS one of the first important actions in work designed to bring about a vastly improved Port of Boston, a bill (S. B. 216 and H. B. 684) has been filed in the Massachusetts Legislature providing for the creation of a strong Port of Boston Authority, that would have complete administrative charge of the program.

Andrew F. Lane, general manager, Boston Port Authority, and Nicholas E. Peterson, vice-president, First National Bank, are co-authors of the Lane-Patterson Bill, which is "an act

abolishing the Boston Port Authority, and establishing a Port of Boston Authority and defining its powers and duties."

Messrs. Lane and Patterson have submitted also a "Proposed Plan for Future Development of the Port of Boston."

The bill was filed by the Greater Boston Development Committee. It provides for a fund of \$15,000,000 for the purchase of property and construction of piers and warehouses for the postwar development of the port.

Addressing the New England Export Club, Feb. 16, Mr. Lane said "the need is urgent for an aggressive and forward-looking plan to improve and enlarge the port. Today, Boston is faced with a critical shortage of adequate port facilities. Each ship leaving or entering the port accounts for an expenditure of \$5,000. In the course of years this amounts to several million dollars worth of business and would greatly benefit Boston."

Summary of Bill

The pending bill may be summarized briefly as follows:

1. There is created a Port of Boston Authority, a State agency which shall be in administrative charge of the Port of Boston.

2. The Authority shall serve under supervision of the Governor and Council as they may deem necessary and proper. It combines the powers of the Division of Waterways of the Department of Public Works insofar as they relate to the Port of Boston with the powers of the present Boston Port Authority.

3. The Authority shall consist of five members to serve five years. The Governor shall designate one member as chairman. Each member shall receive \$50 per day for each meeting, but not to exceed \$5,000 per year, and shall receive necessary expenses incurred in discharge of regular duties.

The Commissioners shall appoint and remove Director and establish his salary.

Director and other employees may travel in performance of official duties, and while so traveling may incur such expenses as said Authority may from time to time approve.

The Authority shall have an office in Boston and employ experts and assistants as deemed necessary. The Authority may investigate any and all matters relating to the Port of Boston.

The Authority may initiate or participate in any rate proceedings or

(Continued on page 104)

Our Merchant Marine

Our World Supply Lines



VICTORY SHIP



TANKER

The American Merchant Marine's cargo routes extend to every continent. Width of supply lines on map indicates relative density of out bound traffic.



Our cargoes include war material of every description, and are the foundation for our victories on land and sea. Return cargoes maintain the home front and provide raw materials for our vast war industries. Ten leading imports are, in order of quantity, sugar, bauxite, manganese ore, coffee, chrome ore, copper, nitrates, zinc, bananas and wool.

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PRESENT planning schedules of the U. S. Army Corps of Engineers contemplate completion of sufficient plans and specifications to permit the initiation of work on waterway improvement projects totaling \$731,000,000 by the late summer of 1945, according to Maj. Gen. Eugene Reybold, chief, Army Engineers.

Addressing the recent convention of the Associated Equipment Distributors in Chicago, Gen. Reybold quickly added, however, that "Since war is still the most important business of everyone in this country, we need not look forward to an early resumption of civil works construction."

Many Plans Ready

Indicative of the fact that there has been no slackening of preparations for postwar waterways improvements was his statement that detailed construction plans and specifications are now ready for a volume of work estimated to cost \$500,000,000 and distributed generally about the country.

The total potential postwar civil works program of river and harbor improvement, flood control and multiple purpose projects, Gen. Reybold said, approximates \$4,600,000,000. This, he stated, includes projects adopted by Congress in the amount of \$3,063,000,000, together with economically justified projects recommended in survey and review reports which have been submitted to Congress.

Waterways' Importance

Limitation of manpower and materials, Gen. Reybold said, have made it necessary to delay work on projects not contributing directly to the progress of the war. He paid high tribute to the contribution which existing waterways have made to the war effort.

"Our thousands of miles of improved inland waterways," he said, "have relieved other modes of transportation of vast tonnages that without the waterways might have broken the back of our entire transportation system. They have permitted large segments of our shipbuilding industry to move to interior points. They have helped to make it possible for other types of war production to be decentralized from labor-critical and industrially concentrated areas, thus mak-

Plans

and

Projects

Specifications are ready for a volume of work to cost \$500,000,000 for improving inland waterways in all parts of the country. During the war our inland waterways have relieved other types of transportation of vast tonnages that without the waterways might have broken the back of our entire transportation system.

ing our mobilization for war more uniform and more complete. Existing federal flood-control works have also made their wartime contributions by providing protection for vitally needed industrial and agricultural production. They have helped to prevent disruption of commerce and transportation and have saved lives and property from damaging flood waters.

"These benefits are the result of the important steps that have been

taken over a long period of years on our waterways program. The Illinois river, at one time just an unimportant tributary of a large river, has been canalized and connected with Lake Michigan. Thus it is now an important connecting link between the navigation system of the Great Lakes and the Mississippi system to the Gulf of Mexico.

"Once the Ohio River was but a treacherous, shoal-infested stream, but today it is one of the busiest lines of

Looking upstream at the Missouri River during the flood of 1943. The center foreground of the photo shows the break in the levee, which caused waters to flood over farm-lands.



Handling structural steel from ship to cars at East Chicago Dock & Terminal Co., East Chicago, Ind.



our inland waterway system. The upper Mississippi was inadequate for modern towboats and barges, but it has been made navigable to the Twin Cities. The lower Mississippi valley has been freed from the destructive floods that beset this area for centuries. Comprehensive improvements on the Missouri, Arkansas and Red rivers are in the making, as well as in other river basins of the country. Aside from the Mississippi and other river systems, our coastal and lake ports and connecting waterways have contributed magnificently to the economy of the country.

"In evaluating the benefits of such improvements we have not been forced

(Continued on page 83)



(Left) At assembly plants, boxes of ammunition are palletized and loaded into freight cars by fork truck or by power-driven hand-lift pallet truck. (Right) To assure the universal use of safe practices, the laboratory also furnishes blueprints for loading and bracing the ammunition in freight cars.

Safety Plus . .

The Navy's Bureau of Ordnance, searching for safer ways of delivering ammunition to the fleet, has some important lessons for industry in reducing damage and speeding shipments through the use of mechanized materials handling.

WIDE awake to any modern developments that will increase the safety of its operations, the Bureau of Ordnance has taken a leading part in the development of materials handling techniques that will profoundly influence industry after the war. Ammunition, like many industrial goods, must be handled a great number of times in its journey from producer

to consumer. Former methods required man-handling each individual box in every loading and unloading operation whether from magazine, freight car, or ship.

By modern methods, several boxes are placed on a pallet and bound into a unit load which is handled by machinery, thus eliminating the slow, back-breaking labor that was formerly

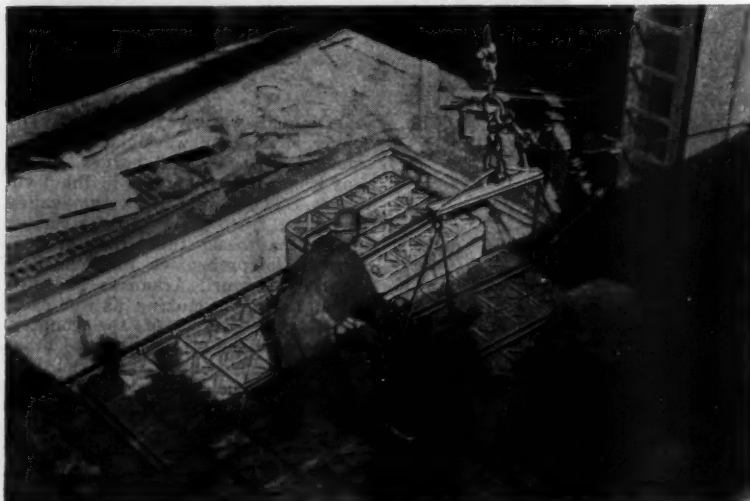
required. BuOrd's primary reason for making the change was the increased safety it introduced.

More Dependable Stows

Unit loads make firmer, more dependable stows, while the machines that handle them never get tired or careless. However, from industry's point of view, the speed and reduction of damage made possible will be even more significant, when it becomes generally known that savings of 75 per cent in shiploading and 95 per cent in carloading are no longer considered uncommon by the Navy.

(Continued on page 79)

The same unit loads are hoisted aboard ship with special safety slings which lock onto the pallet stringers.



Specifications for all BuOrd's unit loads are developed and tested in its laboratory at the Hingham Naval Ammunition Depot.



PHILCO

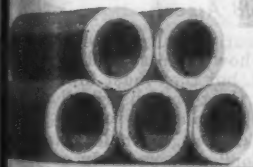
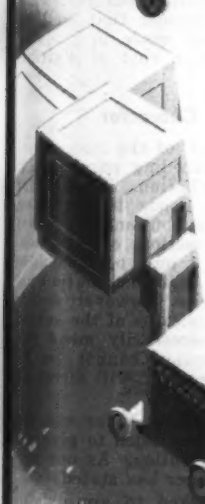
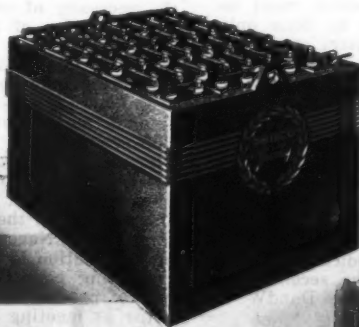
gives you the latest in
Modern Battery
Design !

THOUSANDS of electric industrial trucks are now getting more work done at lower cost because of the advanced research of Philco engineers in developing tougher, more powerful storage batteries. Philco has long led in providing batteries of maximum capacity, with the rugged long-life construction especially engineered for today's heavier work schedules.

Now Philco engineering leadership is demonstrated anew with the storage battery that gives 30% longer life —the great new Philco "Thirty"! For lower cost in handling materials with electric trucks, be sure to include the new Philco "Thirty" in your plans. Now available in preferred types. Complete information gladly sent on request. PHILCO CORPORATION, *Storage Battery Division*, Trenton 7, New Jersey.

For 50 years a leader in Industrial Storage Battery Development

The new Philco "Thirty" with 30% longer life is identified by its distinctive red connectors.



Cost Factors in Distribution

The belief that segregation of transportation costs is unnecessary in any study of the costs of distribution must be consigned to the limbo of forgotten things along with the catawampus. Costs of transportation must be brought out into the light for inspection. The extent to which each individual unit of industry reduces its distribution cost will be reflected in the total cost of national and international distribution, and not until then.

By HENRY G. ELWELL
Traffic Consultant

BACK in the days of the American Revolution some of the inhabitants of our country believed in the existence of a strange being known as the catawampus. The creature was said to be half catfish and half woman with long hair and six horns on its head. However, with the passing of time and the application of commonsense it became evident that the catawampus was merely a stretch of the imagination.

Today, a myth of another sort is current in various quarters in this country. It is based on "erroneous facts" if that description may be used. Many persons holding positions in industry blindly accept the "thing that is not" and assume that segregation of costs of transportation is unnecessary in any study of the costs of distribution.

It is no more absurd to believe in the catawampus than it is to ignore factors of transportation expense when attempting to analyze distribution costs. Actually, the catawampus idea was harmless, whereas ignorance of true costs leads to monetary loss.

It is impossible to control the cost of distribution if all basic factors are not segregated for scrutiny. And it should be understood that the cost of over-all distribution begins with the movement of raw materials at points of origin and continues on through until the finished products are in the possession of the ultimate users, when considering the subject from a national or international viewpoint. It is this general cost which must be reduced, but this can be done only when each unit of industry studies to lower its own specific localized distribution cost.

Cost of over-all distribution is one thing, the distribution cost of a particular unit is quite another matter despite the fact that it is involved in the whole problem. In the case of the individual producer, processor, manufacturer, etc., part of the cost of distribution is a portion of "transportation cost" as indicated in the chart accompanying the second article of this series. (See DandW of Dec., 1944.)

Segregation of Costs

In every establishment segregation of costs of transportation, the setting up of a separate record, is essential. These costs should not be "thrown in" as part of production or selling with-

out first setting them apart for inspection. The major costs of transportation are: (a) freight inwards; (b) materials handling inwards; (c) materials handling outwards; (d) freight outwards. The first two (a) and (b) should be assigned to production and each of the other two, (c) and (d) is a part of a company's total cost of distribution.

It is advisable to place emphasis on the necessity of studying the cost of transportation of the individual concern because it is an important step in the approach to reducing the total cost of nation-wide distribution. There are numerous reasons for this emphasis, not the least of which is the question pertaining to international trade. We, in the United States, may have out-distanced all other nations in producing goods at costs lower than those at which they can produce similar goods. Nevertheless, if our cost of distribution is higher than that of competing countries then our lower cost of production can be nullified insofar as meeting competition in foreign markets is concerned.

Without doubt, the weakest link in the cost accounting practice of a majority of our manufacturing establishments is the lack of information regarding cost of transportation. Time and again one finds that the cost analyses of a company do not pro-

vide sufficient data to enable management to manage efficiently.

Meaning of Distribution

It is possible that this situation is caused by a misconception of the primary meaning of the term "distribution." If it is not generally recognized that distribution is made up of parts, of which transportation is an indispensable one, then it is understandable why management in general has hazy ideas concerning the subject.

From discussions with many executives it is apparent that they view distribution from different angles. For example: some relate distribution to production schedules; others restrict it to the movement of goods from warehouses; not a few consider it from the viewpoint of pool car shipments; one man, who ought to know better, looks upon distribution as that part of transportation which is handled only by wholesalers and jobbers; another sees distribution as being merely the movement of his goods to his customers; while another insists that marketing alone is distribution, or that distribution is nothing more than the shipping of products from a factory to a warehouse for ultimate shipment to customers. With these diversified, but restricted, ideas is it any wonder that so little progress has been made in bringing about reductions in cost of distribution?

Its All-Inclusive Character

Of course, each of the items mentioned in the preceding paragraph is included in distribution. The sale and consignment of goods to customers are parts of distribution. But these things are only sections of the whole. At first glance it may be difficult to grasp the fact that distribution has such a broad scope. However, despite the seeming complexity of the subject this does not necessarily mean that a proper conception cannot be obtained if management will direct attention to it.

Frankly, management for one reason or another has failed to give real thought to distribution. As one general traffic manager has stated:

"If I were asked to approximate the time which the average business man devotes to the problem of distribution in relation to his other problems, a figure of 10 per cent would not be too low."

That statement gives an accurate picture of average management's present attitude regarding the distribution work of an individual company.

Its Two-Fold Aspect

Top executives must take action to determine how the cost of distribution can be cut, but they must first understand that the term "distribution" has a two-fold meaning as follows:

To industry as a whole: the term "distribution" may properly cover all activities incident to the movement of all "goods" in commerce.

To each individual unit of industry:
(Continued on page 46)

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Example of
COST ANALYSIS
For Month of 1945

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(b) Total of items, excluding those reported under (a), not covered by other headings. When any item in this total is recurring in excess of \$
Analysis sheets.

the term "distribution" covers all activities incident to the outward movement of each unit's "goods" in commerce.

Before the cost of over-all distribution can be lowered, it is essential that the management of each unit of industry reduce its own cost. When this is accomplished then the total cost in all industry will automatically be reduced.

It is true that management has made some attempt to study ways to lower certain parts of distribution, but as has been mentioned little attention is given to the cost of transportation which is such a large factor in the case of most manufacturers, etc.

Factor of Transportation

To analyze the cost of distribution of a company it is first necessary to study the costs of transportation and segregate "materials handling outwards," and "freight outwards." These are factors bearing directly on a company's total cost of distribution and vitally affect its selling price.

Away back in 1930 the U. S. Department of Commerce issued a report directing attention to the need for giving proper weight to transportation costs. In the report it was shown that in numerous manufacturing establishments the cost of transportation amounted to as much as 23 per cent of the selling price and 26 per cent of the cost of doing business. Yet management and cost accountants gave little heed to the warning, and the traffic managers, as a group, took no action to realize the opportunities outlined in the report.

Department of Commerce Report

From that report of the Department of Commerce we quote the fol-

lowing which applies today exactly as it did on the day it was published:

"One of the most important expenditures necessary in the conduct of business is made for transportation service. Nevertheless, it is the one major expense regarding which least is known. It also is the one that many businesses make no attempt to administer, believing it to be a 'necessary' or 'dead' expense which must be paid without question, which can not be reduced, and over which they have no control. One explanation of this is undoubtedly the too-narrow conception that is prevalent regarding what constitutes transportation costs. Instead of being merely the sums paid to carriers for hauling services, these expenditures are in reality much more inclusive."

As previously stated, in order to determine the transportation cost of a given company it is necessary to provide for itemized entries. Just how this may be done in each specific instance is not of prime importance, but it is imperative that some sort of record be established.

Cost Analysis Chart

As an example of a cost analysis embracing the essential basic information relating to costs of transportation, we include with this article a sample outline which has been prepared by a cost accountant.

This cost analysis will be used by the general manager, or other appropriate executive of a company, in connection with supporting cost sheets for the factory superintendent, sales analysis for the general sales manager and other reports, each giving more details than the over-all cost analysis.

In regard to total production cost, consideration, therefore, can be given

by supporting data to such particulars as raw materials on hand, goods in process, finished goods, intra-plant materials handling, service and maintenance, equipment depreciation, etc. Similarly, with total cost of distribution, items such as newspaper and magazine advertising could be broken down, while sales for the period would show the amounts for the various classes of commodities.

However, these matters are outside the scope of this article which has particular reference to transportation, the movement of materials, and similar costs; they are included only to give a general surrounding of the transportation picture. This also is the purpose of the sheet which we have here reproduced.

No Standard Form

It seems there can be no standard form of cost analysis; each will be different for each organization for which it is prepared as a guide for management. The example herewith contains a number of headings which some manufacturers will not need, and it also is without certain headings which will be indispensable to others. What we wish to stress is that all transportation expenses and allied cost items properly have places in the analysis, and must be there if management is to be in a position to manage intelligently.

The myth of "erroneous facts" must be consigned to the limbo of forgotten things along with the catawampus. Costs of transportation must be brought out into the light for inspection. The extent to which each individual unit of industry reduces its distribution cost will then be reflected in the total cost of national and international distribution, and not until.

Better Packing and Shipping Campaign Plans

WITH an estimated 60-million-dollar national loss and damage of freight in transit during 1944, a nation-wide perfect shipping campaign will be conducted throughout April as a means of reducing this large wartime waste, according to J. E. Bryan, of Chicago, general chairman of the committee in charge of the drive and general traffic manager of the Wisconsin Paper & Pulp Mfrs. Traffic Assn.

The purpose of the campaign, Mr. Bryan declared, will be to drive home to every shipping agency, shipping employe and the public the tragic waste of wartime effort which results from poor packing and improper handling of freight. It will also have the additional objective of improving packaging technique in the preparation of shipments in the postwar period, he said.

The 13 regional Shippers Advisory Boards, with a membership of more than 23,000 shippers and receivers of freight and express, will take an active part in the campaign, Mr. Bryan stated. Others who will participate include the Assn. of American Railroads, the Railway Express Agency and other transportation agencies, he added.

Mr. Bryan announced that an intensive educational campaign will be carried throughout April at local meetings of shipper organizations, traffic and trade bodies, chambers of commerce and other business groups. The emphasis of the campaign, he pointed out, will be upon the vital necessity for conserving our wartime resources by preventing the loss of war products through damage in shipment before they ever reach the fighting fronts.

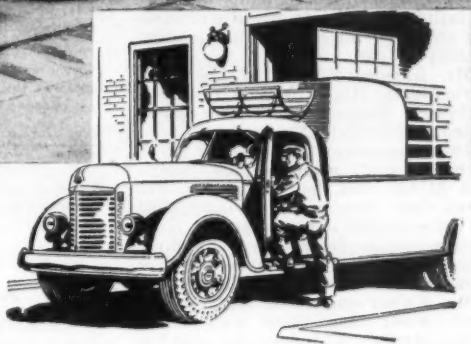
The increasing extent of this loss, Mr. Bryan said, can be measured by the fact that national freight damage was about one-third greater in 1944 than it was in 1943.

"The waste from careless packing, marking and handling," Mr. Bryan continued, "has reached a tremendous lost-value figure, and our wits and resourcefulness are again challenged to cut this to a minimum."

"The war has impressed upon us that it is the end use of goods that counts. Take bullets, bombs, parachutes and life rafts, for instance. We know that what gives value to all goods is their arrival at destination in perfectly usable shape. Take food, medicine and blood plasma. That we knew, or found out, how to package, pack, load, stow and carefully handle these things from here to there has been demonstrated."



Symbol of **SERVICE** *on the* **Shipping and Warehouse Front**



INTERNATIONAL Tractors and Trucks DELIVER the GOODS

MORE than ever before, our fighting fronts are depending on a steady stream of supplies. Transportation is the most pressing problem of the Armed Forces and war industries.

International Tractors and Trucks are important cogs in the machinery of movement. You'll find them at docks and terminals—loading and unloading, connecting factory and warehouse, ship and shore, plane and train.

Internationals have a long and excellent record of peacetime performance. That is why they're used so often and in so many ways wherever there is a tough transport problem to lick. For dependable day after day operation, count on International Tractors and Trucks . . . and when they need service, use the facilities of the International Industrial Power distributor and the International Truck dealer.

INTERNATIONAL HARVESTER COMPANY
180 North Michigan Avenue Chicago 1, Illinois

TRUCK transportation is the fast, convenient link between shipper and consumer. It provides direct and economical operation—always important, especially in wartime.

Because of their outstanding leadership in truck development, Internationals have long been favorites with truck operators. More heavy duty Internationals were sold in the ten years before the war than any other make.

Keep your International in top operating condition. Make use of the service facilities of the International Truck dealer. He'll help you win your part of the war against wear and keep your truck rolling.

INTERNATIONAL HARVESTER

Motor Cargo ...



Kaiser Now Making Trucks of Magnesium

Henry A. Kaiser, well known industrialist, told the Senate Small Business Committee last month that one of his companies is making trucks and trailers of magnesium and that plans for constructing destroyers of aluminum have been completed.

The committee is studying the post-war prospects of the magnesium and aluminum industries. Mr. Kaiser said plans for building an all-aluminum destroyer were completed the day before the Jap attack on Pearl Harbor. They were set aside then, but after the war, the destroyer will be built, he said, and will be capable not only of sailing at 60 knots, but also of turning on a shorter radius than present destroyers can.

Mr. Kaiser said one of his firms, Permanente (Cal.) Metals Corp., is building magnesium trailer-trucks called "trailmobiles."

The magnesium bodies cost \$3750 each, he said, whereas steel bodies cost \$1750. But, he added, they can carry four tons more payload. One of these trucks now is hauling magnesium oxide from Moss Landing, Monterey, Cal., to Permanente three times a day, Mr. Kaiser said.

Mr. Kaiser suggested that government-owned magnesium and aluminum plants be leased or sold to private companies after the war on terms similar to investments of private companies in comparable privately-owned plants.

Synthetic Rubber Now 85% of Total

Synthetic rubber now constitutes 85 per cent of total rubber used in this country, Vice-President Newman of B. F. Goodrich Co., declared in recent speech at Memphis. He said U. S. is close to "the bottom of the natural rubber barrel" and has achieved in a few years with synthetic rubber what it took nearly 70 years to accomplish with natural rubber. Synthetic rubber used in 1944 was 565,000 tons against 6,000 tons in 1941.

Louisiana Assn. To Publish Weekly

The Executive Committee of the Louisiana Motor Transport Assn. has authorized officials of that organization to publish a weekly paper and the publication is expected to make its initial appearance at an early date. Miss Grace Ramke has been engaged as editor. The paper will carry news stories and feature articles of interest

Truck-Trailer Program Held Insufficient

The truck trailer manufacturers industry advisory committee has informed the War Production Board that the reduced commercial trailer program for 1945 is insufficient to cover essential commercial transportation requirements.

The regional WPB office said authorizations issued last September called for the first half 1945 production of 11,248 commercial general freight trailers. This amount has been reduced to 9016 on a revised schedule.

WPB said today that civilian and military requirements for trucks would be greater this year than the total production of 1944.

to the various types of motor transportation operators as well as advertising from allied industries.

Arizona Standardizes

Culminating three years of effort toward that end, the Arizona legislature has passed a bill making commercial vehicle sizes and weights in Arizona uniform with those of the neighboring state of California. (Herr.)

Trucks Substituted For Rail Service

Ohio Public Utilities Commission has approved a request by Pennsylvania Truck Lines, Inc., Pittsburgh, that it be allowed to substitute motor vehicle freight service for railroad service on several Ohio lines as a war emergency.

At the same time, representatives of the utilities commissions of Ohio, Indiana, and Pennsylvania conducted a hearing in Columbus, Ohio, on a proposal for a permanent operation of motor vehicle lines paralleling the present railroad lines. (Kline.)

Livestock Truckers Get Rate Increase

The California Railroad Commission has granted a 20 per cent rate increase to truckers hauling livestock within the state as highway carriers.

The decision also provided that in the future the minimum weight shall be determined on the basis of 90 per cent of the carrying capacity of trucks and trailers used.

The petition for the rate increase was supported by trucking and farm interests as well as cattle and wool growers associations on the contention that livestock men have been unable to obtain trucks to haul their stock at the former rate because truck operators were inclined to seek the more profitable hauling jobs offered by Army and Navy. (Herr)

590 Houses Not Built to Be Demountable Being Moved in Sections on Big Trailers

The transporting of 590 houses, not built to be demountable, from the huge Maple Grove federal housing project in Portage County, Ohio, near Ravenna, to Royal Oak, suburb of Detroit, where they are urgently needed for Negro housing, was started late in January and is expected to be completed within 90 days, according to Arthur J. Puatten, owner of the Trailer Transportation Co., Flint, Mich., whose firm is doing the job.

The dwellings are part of 2000 housing units built near the Ravenna Ordnance plant, but were never occupied because employment there did not reach original expectations, and the transportation problem was difficult. Only about 400 of the dwellings were in use.

The cutting apart and transporting

of these dwellings is believed to be the first such job in the United States. The Federal Public Housing Authority contracted with the Bush Contracting Co., Inc., of New York, to do the revolutionary job, and the Bush firm sub-contracted with the Trailer Transport Corp.

The houses are being cut apart by slicing off partitions, floors in sections, tops of buildings, and then preparing whole lower sections to be lifted intact by huge cranes on to giant trailers. On two-story buildings the top floor is "panelized" but all of it is the same job, lifting big chunks of a house at one time. Total of 160 men and 100 pieces of equipment are being employed. Half the men are doing the transportation end of the job. (Kline.)

Studebaker salutes *America's Laundry Industry*

*Laundries are making
an annual saving of
380,000,000 truck miles
and 34,000,000 gallons
of gasoline!*



THE Office of Defense Transportation has thanked the laundry industry for its "splendid spirit of co-operation" in achieving a 40 per cent reduction in truck mileage.

Studebaker joins with ODT in commending America's laundries for a great job well done.

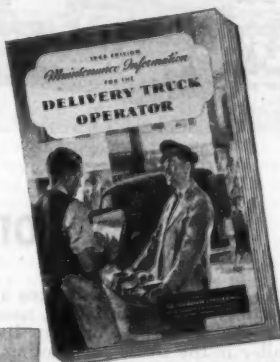
Before the war, according to the American Institute of Laundering, the laundry industry's 53,000 trucks traveled about 950,000,000 miles annually, yet, last year, in compliance with the national need for conserving trucks, tires and gasoline, the laundries handled 165,000,000 more family bundles than in 1940—and in doing so, saved 380,000,000 truck miles and 34,000,000 gallons of gas.

In giving 12,000,000 U. S. families this extra service, the laundries have made it possible for 1,500,000 women to go into war work and other vital home front activities. And don't forget, the laundries have also been doing 85 per cent of the laundry of the Army Air Forces in addition to 55 per cent of the laundry of the Army Ground Forces.

Laundries and other truck operators find Studebaker's handbook helpful

As one of its many continuing wartime public services, Studebaker published a handbook of information on motor truck care last year that was highly praised and widely used by truck operators in many varied lines of business.

In response to popular demand, a new 1945 edition of that handbook is now ready. It contains 48 pages of timely information on how to maintain all makes of motor trucks and improve their performance. You can get a sample copy free from any Studebaker car or truck dealer or by mailing the coupon below.



MAIL THIS COUPON NOW!

Studebaker Truck Division, Dept. DW-21, South Bend 27, Indiana
Please forward free and postpaid sample copy of "Maintenance Information for the Delivery Truck Operator."

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*Pioneer and pacemaker
in Automotive Progress*

BUILDER OF WRIGHT CYCLONE ENGINES FOR THE BOEING
FLYING FORTRESS—HEAVY-DUTY STUDEBAKER MILITARY
TRUCKS—THE WEASEL PERSONNEL AND CARGO CARRIER

Northwest Motor Freight Operators Pessimistic About Trucking Outlook

SPOKANE, WASH.—The immediate business outlook for the motor freight industry is not good. This is the considered opinion of Spokane motor freight officials.

"Cost of operation in the Pacific Coast region has jumped from 90 per cent of revenues in 1943 to 95.6 per cent in 1944" Grover C. Ealy, president of Inland Motor Freight Co., Spokane, advised. For the entire United States the percentage cost has jumped from 94.9 in '43 to 96.8 in '44.

While OPA has prevented an increase in freight rates, motor freight companies are paying from 33 to 43 per cent more for parts and inferior tires than they did before the war. The cost of labor has also increased 20 per cent in the last two years.

"Most motor freight companies must have either an increase in freight rates or must curtail operations or be granted government subsidies to continue operating at a profit" William Maher, local manager of Consolidated Freightways advised. "Some motor freight companies in Minnesota, Wisconsin and South Dakota have been turned over to government control because they could no longer operate."

Inland Motor Freight carried about 265,100,000 lb. of freight in 1944, an increase of 10 per cent over 1943, according to company records. Consolidated Freightways has remained steady at approximately 70,000,000 lb. a month for both '43 and '44. Inland Motor Freight operates 133 trucks and 57 trailers. Consolidated Freightways has between 500 and 550 pieces of equipment in operation at present.

A total of 2058 miles a day has been saved by all motor freight lines operating out of Spokane. This mileage savings was worked out between truck lines with the office of defense transportation in '42.

Tires are a major problem for the auto freight industry. Dave Smith of Eland and Stewart Motor Freight said that new synthetic tires last only about three months on his trucks. Tires formerly lasted about two years.

The auto freight companies should get more tires and parts in '45 judging from present outlook. Consolidated Freightways is getting 25 new trucks and trailers.

About 75 per cent of the freight loads either are for the armed services or related to it.—(Haskell)

Western Terminal Co.

Western Terminal Co. has been organized at Los Angeles, Cal., and has received articles of incorporation, with capital stock of \$75,000. Active in the new concern as directors are Arlo D. Poe, A. Meyers and Rufus Bailey of Los Angeles. (Herr)

More Iron and Steel For Trucks and Trailers

Special limitations on the use of iron and steel in truck and trailer bodies have been removed through the revocation of Order L-253, the War Production Board has announced.

However, amendment No. 4 to Order M-216, prohibits the use of stainless steel in truck and trailer bodies except in milk trucks and refrigerator type trucks. Iron and steel available for truck and trailer bodies, other than stainless steel and galvanized sheets, will be subject to the regular CMP allotments by WPB's Requirements Committee.

New Service Offered By Edison-Splittdorf

Under the direction of M. P. Carroon, transportation engineer, a new transportation service department has just been started by the Edison-Splittdorf Corp., a subsidiary of Thomas A. Edison, Inc., West Orange, N. J.,

according to A. J. Clark, vice-president and general manager. This new service unit will cooperate with motor truck fleet engineers, maintenance superintendents and mechanics on spark plug problems.

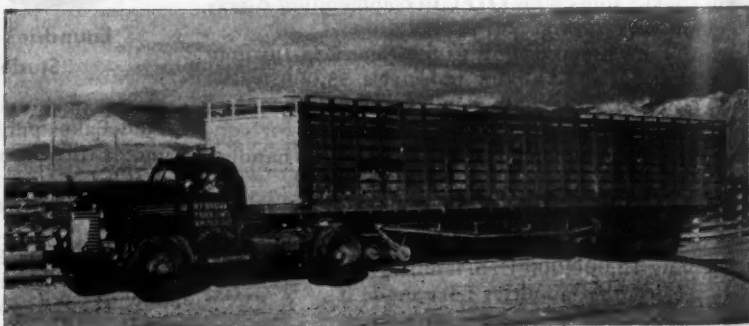
Its functions include complete surveys of fleet units, studies of specialized ignition requirements, instructions of mechanics in correct spark plug application for conditions of motor, load, operation, etc., and where necessary, consultation with Edison-Splittdorf laboratory for development of special spark plug types.

Tires Must Be Inspected Regularly ODT Warns

Failure of commercial motor vehicle operators to comply with regulations requiring periodic tire inspections will adversely affect the claims of these operators for new tires, the Office of Defense Transportation has announced.

The ODT warned that General Order ODT 21A requires all commercial motor vehicle operators to have their tires checked after each 5,000 miles of operation, or after every six months of operation if operated less than 5,000 miles.

Office of Price Administration action lifting this requirement for passenger car tires in no way affects compliance of commercial motor vehicle operators with ODT tire inspection requirements, it was pointed out. Inspections may be made by any agency designated by OPA.



World's Longest Cattle Trailer

R. F. Brown, who operates a truck line in Albuquerque, N. M., uses what is probably the longest livestock trailer in the world for hauling cattle. It is a Fruehauf 45-ft. tandem-axle unit, hauled by an International tractor. This trailer hauls cattle from Cimarron, N. M., to the Santa Fe Railroad at Raton, N. M. The haul consists of approximately 50 miles of hazardous mountain driving at elevations of from 6,000 to 7,000 ft. Because of the removal of the railroad feeder line from this area, this unit is the only way that ranchers in this vicinity have of moving their cattle to Raton.

Typical loads hauled by Brown are 61 head of cattle at one time; 150 sacks of wool on another occasion. One of his loads was 23 head of 1,400-lb. Brahma bulls which were used at the New Mexico State Fair Rodeo. He has also hauled 39 head of horses in this unit on one trip.

The entire job, including the tractor, is 59½ ft. over-all length. The racks are 6 ft. high and have two partitions forming three separate pens in the trailer length. Highly important in that area are good brakes and the tandem axles are both equipped with 6-in. air-brakes and manual rollback supports.

Research Made On Cargo Handling

Research aimed at making methods of air cargo ground-handling faster, easier, more convenient, is the outcome of SAE aeronautic meetings in New York.

Engineer speakers characterize as "antiquated" present organization of personnel along bucket-brigade lines; paper work which makes cargo rooms reminiscent of boom-time stock exchanges; and grounded-time of as little as 10 minutes.

Human speed limitations are recognized as chief delaying factor, and research appears headed for changes in plane design, high-speed ground equipment, mechanization of handling operations.

American Establishes New Cargo Record

American Airlines, Inc. recently established a new monthly air freight record for the line out of LaGuardia Field when it carried nearly 74,000 lb. of cargo. This 28-day high doubled the previous record of 37,000 lb. established during the 31 days of January this year.

Air Freight Service Speeded Up

Commercial air freight movements have been speeded up considerably at Allegheny County airport in Pittsburgh, Pa., and better connections now are possible. (Leffingwell.)

Survey Shows Low-Rate, Ideal Plane Needed for Feederline Aviation Service

Feederline air travel rates might be set as low as 3.5c. per passenger mile, including city to airport trips, if an ideal type of airplane can be built for the purpose, according to a comprehensive survey completed by the development division, Fairchild Engine and Airplane Corp., under the direction of Dean C. Smith.

Results of the survey show that, contingent upon development of the ideal plane, a potential market for 500 to 600 new short-haul aircraft in the United States may exist within the three-year period after sales are approved.

Survey estimates were derived from an exhaustive analysis of feederline route applications, Civil Aeronautics Board policies, economic factors affecting local air transportation, and the effect of war-surplus aircraft on initial requirements.

If feeder routes are granted by the CAB in the near future, surplus military aircraft may have to be used for a short time. Rapid replacement of surplus aircraft should occur when planes become available that are capable of providing the marked operating economies required for the low-cost short-haul travel market.



Reg. U.S. Pat. Off.

Department of Justice Recommends World Board for Air Information

Vast Mileage Increase

Recent survey by the Air Transport Assn. of America reveals that increases in mileage of routes for air transportation in this country during 1944 were 8,435 miles, which is almost the equivalent of the entire system of airways in the United States only 17 years ago.

Great Lakes Area Pickup Routes Asked

A system of 23 air pickup routes in the Great Lakes area has been sought by All American Aviation, Inc., in an application filed recently with the CAB. The proposal covers cities and towns in Illinois, Michigan, Indiana and Ohio.

In a report advising formation of an international organization for analysis of information on air carrier operations, rules, etc., the Justice Department has also voiced its opposition to single-company operation of America's international air transportation and to surface carriers, such as steamship companies, owning or controlling international airline companies.

America's air transportation policy as outlined by the Department should include these points:

1. That this country adopt a policy of controlled competition.
2. That it seek an understanding with other countries to define and limit the amount of governmental financial assistance to be given international airlines.
3. That an international organization be formed to analyze information on air carrier operations, laws, regulations, traffic and safety rules, and to serve as a medium for solving world airline problems.
4. That economic and legal conditions be of a nature to encourage continued private operation of America's international air carriers.

The department added, however, that government operation of an international airline might be advisable when absence of profit opportunities made private-company operation impossible.

The report is the first of a number to be submitted to Congress. Others will deal with machine tools, metals, synthetic rubber and aviation gasoline.

The aviation survey recommended that the right of a carrier to land in a foreign country for refueling, repairs or other services be established as an international principle.

The report said this country should see to it that United States airlines "will carry a volume of world traffic commensurate with the importance of the United States as a market for air transport services." It would forbid foreign control or ownership of U. S. flag airlines and added "such a policy may very well be imitated by other countries." It recommended that all international carriers be permitted to use international airways, communications facilities, meteorological services and airports without discrimination.

Some Overseas Potentials In Air Cargo

Historically, first class sea transportation either for passengers or cargo has been confined to a few established sea lanes between seaports of first magnitude. The airplane places transportation of first quality within the reach of all world traffic centers regardless of their proximity to these great sea lanes. The ability of the airplane to permit direct interchange of traffic between interior traffic centers should have an appreciable effect upon the pattern of world shipping.

INTERNATIONAL air express hit a new high in 1944 with 248,519 shipments, a 43.4 per cent increase over 1943 when 173,200 shipments were handled. For this service shippers paid upward of \$900,000 in express charges in 1944 as against an approximate total of \$610,000 in 1943, indicating a jump of about 47 per cent. Both incoming and outgoing traffic are included in these totals. A monthly average of more than 20,700 international air express shipments was struck during 1944, well over the monthly average of about 14,190 reached in 1943.

With such increases in traffic the question naturally arises as to whether, after the emergency factor, now so powerful, is no longer present, there will be as much or more international air cargo as these figures seem to indicate. Surely there will be a tremendous growth in international air trade and travel after the war. A good deal of thought has gone into forecasts of what the passenger traffic may amount to but less thought has been given to air cargo potentials even though trans-oceanic airline operators present and prospective have not lost sight of this end of their business.

Potential Air Cargo

The Bureau of Foreign and Domestic Commerce of the United States Department of Commerce has issued several studies surveying potential air cargo traffic with certain countries both for exports and imports. These studies are summarized in Tables 1 and 2, and are the only such now available. In undertaking these studies it was believed that an analysis of pre-war trade would furnish some indication of the specific commodities that might be diverted to air transportation in the postwar period. The United States export and import statistics with the countries surveyed; for 1939, were used since that was the latest year not showing the effects of war.



By JOHN H. FREDERICK
Air Cargo Editor

• • •

A study was undertaken of the thousands of commodities moving between the United States and seven South American countries and to South Africa. Four basic factors were taken into consideration as of major importance in selecting commodities offering the best prospects for transportation by air. These factors were: (1) value per pound; (2) perishability; (3) fragility; and (4) style, including obsolescence.

Basis of Comparison

The Bureau of Foreign and Domestic Commerce experts decided that commodities with a value of less than 50c. per lb. would not be likely to move by air. In fact, it was felt that many commodities above the 50c. level, particularly between 50c. and \$1 per pound, would offer but slight prospects for air carriage unless additional factors, such as perishability, fragility, or style were also involved. A commodity worth 50c. a lb. has a value of \$1,000 per ton.

If it can be assumed that the typical air cargo shipment will move 4,000 miles between the United States and South America, for example, and that

the airline charge is 15c. per ton-mile, then the transportation charges on one ton would equal \$600 or 60 per cent of the value of the commodity. A commodity worth \$3 a lb. has a value of \$6,000 per ton and on the basis of the assumptions just stated, air cargo charges would amount to the same sum, that is, \$600, or only 10 per cent of the value of the commodity. (In 1939, railway freight revenue in the United States equaled 8.43 per cent of the value of all commodities carried. This gives us a basis of comparison.)

Factors Considered

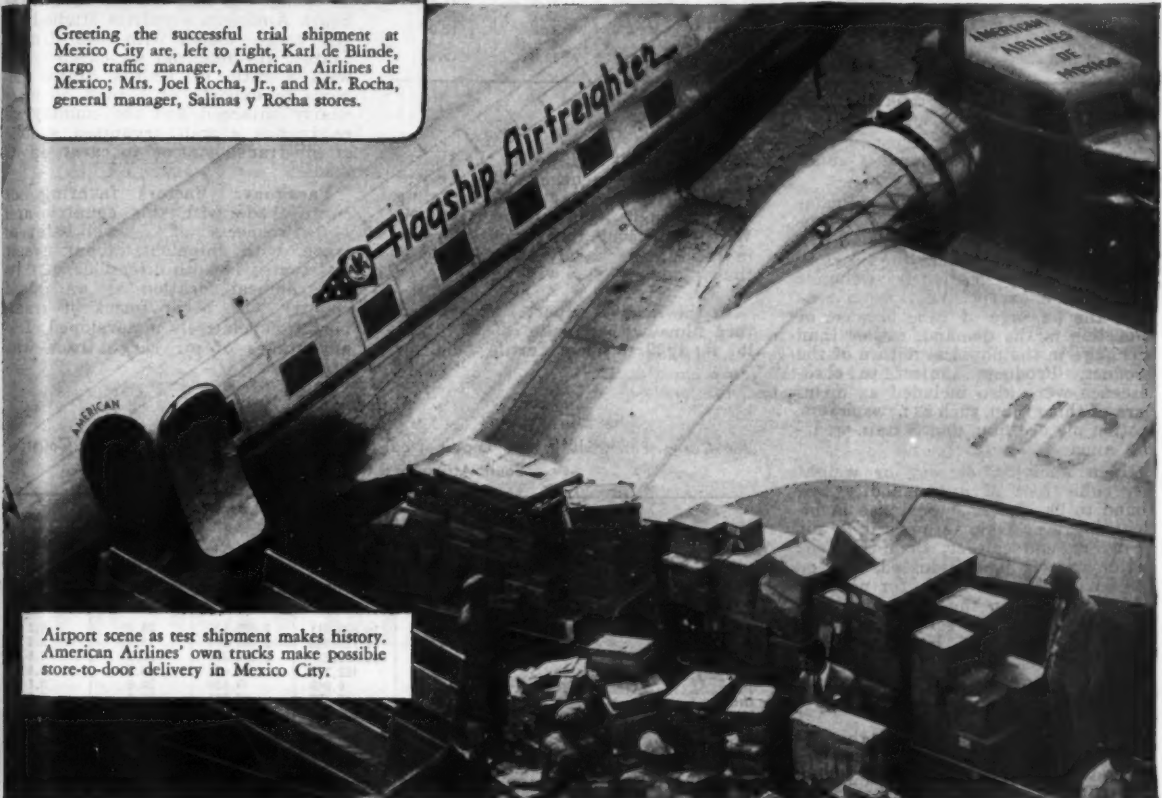
In determining what commodities might be included as prospects for air transportation because of perishability it became evident that a large number might be so considered if a long enough time period and sufficient exposure to the elements were assumed. Therefore, in deciding whether or not a commodity might be considered as perishable when moving in international trade, consideration was given, in the studies under review, only to the normal time spent in transit via usual surface methods of transportation, assuming customary packing, handling, and storage of the commodity. If, for example, it was found that apples packed in barrels could be shipped from New York to Rio de Janeiro in four weeks, and that apples packed in barrels normally do not deteriorate in less than eight weeks, than apples, for the purposes of these studies, were not considered as perishable. Commodities requiring refrigerants, special temperature control or ventilation during their period of movement were, however, classed as a perishable.

The experts discovered that fragility, or breakability, is a term which, like perishability could characterize almost all commodities under certain conditions. They, therefore, considered only those commodities as fragile or breakable when special care in handling or special packing

Preview Shipment of INTERNATIONAL AIRFREIGHT Hailed in Mexico City



Greeting the successful trial shipment at Mexico City are, left to right, Karl de Blinde, cargo traffic manager, American Airlines de Mexico; Mrs. Joel Rocha, Jr., and Mr. Rocha, general manager, Salinas y Rocha stores.



Airport scene as test shipment makes history. American Airlines' own trucks make possible store-to-door delivery in Mexico City.

American Airlines Announces New Service Beginning Apr. 1st

Now American Airlines' Airfreight is being expanded to include International Airfreight. This service provides through transportation of international cargo on one-way bill, at new low rates. Reductions range from 35 to 50 per cent.

Recently, a 4,950-pound preview shipment aboard the first all-cargo International Airfreighter foreshadowed the success of the new service and drew praise from participating shippers. The flight originated in New York, picked up cargo from the West at Fort Worth.

Joel Rocha, Jr., general manager of the 13 Salinas y Rocha department stores in Mexico had this to say:

"American Airlines' International Air-

freight is the answer to the most serious problem facing us today: how to get merchandise to Mexico from the U.S. intact and on time for sale. We have studied all costs involved in international traffic, including packaging and repackaging, customs fees, transportation charges, etc., and we are convinced that, with the new, low rates effective April 1, this is the most economical service possible. We intend to use International Airfreight for most of our merchandise moving from the U.S. to Mexico."

International Airfreight can work for you, too. Write now to Airfreight Division, American Airlines, Inc., 100 East 42nd Street, New York 17, N. Y.



In the shipment are 700 lbs. of drugs from Eli Lilly, Indianapolis; vital war material for the Mexican army; Max Factor cosmetics from Los Angeles; merchandise from Hattie Carnegie, New York; live chicks from Jim Drew's hatchery, Dallas, and a shipment from Associated Merchandising Corp., N. Y.

AMERICAN AIRLINES *Inc.*

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D and W, April, 1945—53

TABLE 1

Air Cargo Potentials in the Export Trade Between the United States, Certain South American Countries and South Africa*

Countries of SOUTH AMERICA	Number of Commodities	Shipping Weight 1939 (lb.)	1939 Value (\$)	Percentage of total export trade represented by Air-Cargo Potential	
				(By Number)	(By Value)
Argentina.....	401	9,753,575	9,979,776	31.9	14.1
Brazil.....	476	13,575,373	10,991,762	35.0	13.6
Colombia.....	484	39,181,279	10,755,901	32.2	21.2
Paraguay.....	142	135,575	99,201	29.8	14.8
Peru.....	445	8,897,994	3,294,096	32.9	17.5
Uruguay.....	282	673,539	865,454	32.2	13.0
Venezuela.....	808	34,710,561	10,479,074	33.8	17.0
SOUTH AFRICA	437	20,011,410	13,441,097	30.8	19.5

* Compiled from reports of the U. S. Department of Commerce.

was required to avoid damage under normal conditions of shipment.

Style was also considered as an important factor in influencing commodities to move into the air and this category included all those commodities which lose their economic value at an exceptionally rapid rate with the passage of time because of a decline in the demand, rather than a change in the physical nature of the product. Products subject to obsolescence were also included as members of this group, such as newspapers, motion picture film, and certain wearing apparel.

Upon analysis, density or weight per cubic foot of a commodity was found to be of less importance in influencing a decision to move it by air or by ground carrier, than the four major criteria just discussed, and, on the basis of new designs for postwar air cargo planes, the Department of Commerce experts felt this factor might even become less significant in the future.

Latin Potentials

Argentina: The value of the annual potential air cargo between the United States and Argentina, taking 1939 figures as a guide, amounts to nearly \$12,500,000. While this seems quite substantial, the lack of balance in the trade with \$9,979,776 southbound (exports) and but \$2,468,123 northbound (imports) as shown in Table 1 and 2, will act as a deterrent to the establishment of extensive air cargo services. The heavy weight shown for imports of commodities with air cargo potentials (14,678,511 lb.) is due to the inclusion of grapes, a perishable commodity. In 1939, this import had an average value of \$0.04 per lb. and at an air cargo rate of about 10c. per ton-mile it would cost

35c. per lb. to fly grapes to the United States from Argentina. The pre-war steamship rate on grapes, including refrigeration, was \$1.60 per 100 lb. With such a wide margin of difference in rates, it is hardly to be expected that many grapes will be imported by air.

In the field of exports, motion picture films with a value of \$2.79 per lb. in 1939, offer a fertile field for

to this country may not be as unbalanced as it now appears.

Brazil: This country also presents an unbalanced picture with \$10,991,762 southbound potential air cargo and \$3,406,212 northbound. When weights are considered it is even more unbalanced (see Tables 1 and 2) because of the inclusion of diamonds in the import list. Air cargo trade moving heavily in one direction keeps costs per ton-mile high in both directions.

Colombia: This country stands out as being the best suited of all the South American countries studied for air cargo trade with the United States. Its potential air cargo trade, with a ratio of United States imports to exports of 1 to 5, is more nearly balanced and the country already has a well organized system of air transportation to carry on its trade.

Paraguay: Factors favoring air cargo trade with this country are: (1) Prospects of a well-balanced trade, with shipments about evenly distributed in both directions. (2) Its geographical location as an inland country with other forms of transportation relatively undeveloped. Disadvantages of air cargo trade with

TABLE 2

Air Cargo Potentials in the Import Trade Between Certain South American Countries, South Africa, and the United States*

Countries of SOUTH AMERICA	Number of Commodities	Shipping Weight 1939 (lb.)	1939 Value (\$)	Percentage of total import trade represented by Air-Cargo Potential	
				(By Number)	(By Value)
Argentina.....	88	14,678,511	2,468,123	29.0	4.2
Brazil.....	47	1,731,335	3,406,212	18.4	3.2
Colombia.....	46	10,488,227	2,285,384	50.5	4.8
Paraguay.....	8	182,273	93,453	30.0	5.6
Peru.....	28	6,648	19,630	24.8	0.1
Uruguay.....	12	47,120	19,603	15.9	0.2
Venezuela.....	20	4,302,884	184,009	27.0	0.1
SOUTH AFRICA	39	866,025	17,879,632	30.5	64.4

* Compiled from reports of the U. S. Department of Commerce.

developing air traffic. Not only do they have a high rate of obsolescence but a film is a revenue-producing commodity, and time spent in transit is idle time during which no revenue is earned.

A nation as foreign-trade minded as Argentina will doubtless develop all possible outlets for its products to the utmost and remunerative traffic in products not a part of the 1939 trade picture will certainly be discovered; so the future of air cargo

this country are: (1) Its distance from the United States will increase transportation costs proportionately. (2) Potential volume is not great and trade would probably be in comparatively low-valued commodities.

Peru: It will be noted in Tables 1 and 2 that the number of export commodities offering air transport possibilities between the United States and this country is 16 times as large as the analogous import commodities, the comparative figures being 445 to 28. The difference between the values of potential southbound and northbound traffic is even more striking. Expressed in terms of value per pound exports show a value of 37c. and imports \$2.95. This difference in value is due primarily to the fact that a tremendous quantity of explosives (dynamite) with a value of only 11c. per lb. was shipped to Peru in 1939. The unbalance in potential trade mitigates against the possibility of successful air cargo development and creates special financial

(Continued on page 112)

TABLE 3

Air Cargo Potentials in Trade Between the United States and South Africa for Commodities Valued at \$2.00 or More Per Pound*

Number of Commodities		Shipping Weight 1939 (lb.)	1939 Value (\$)
Exports.....	101	2,073,929	5,342,379
Imports.....	21	316,480	3,430,647†

* Compiled from U. S. Department of Commerce "Air Cargo Potentials Between U. S. and South Africa."

† Less diamonds imported into the United States via London.

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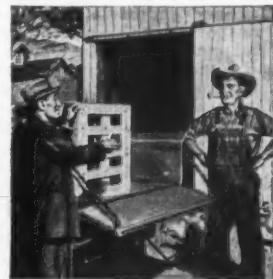
Gets Pump by Air Express: Dealer Saves Money, Cows get Water



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• The basis of any desirable and constructive foreign trade is a healthful state of domestic trade.

— Henry Ford II

New Committee To Set-Up Uniform Technical Standards in Americas

Formation of a planning committee to make recommendations for an intensified program to encourage adoption of uniform technical standards throughout the Americas, as an aid to industrial development and trade, has been announced by the Inter-American Development Commission.

Organizations represented on the planning committee are the Pan American Union, Department of Commerce, Department of State, American Standards Assn., and the Inter-American Development Commission.

Inter-American industry and trade stand to benefit by the adoption of uniform standards, particularly in such fields as electrical equipment, factory and industrial machinery, and transportation. When uniform technical standards do not exist in these and hundreds of other industrial and commercial categories, trade and industry are handicapped inasmuch as equipment and other products of one country cannot be used in another.

The planning committee will consider plans for an aggressive standards program with both private and governmental participation throughout the 21 American republics. The committee also will recommend steps to be taken toward the formation of an organization to carry out the program, as was proposed in one of the 45 resolutions adopted at the First Conference of Commissions of Inter-American Development in May, 1944.

This resolution provides for the establishment of the Pan American Standards Committee, to be made up of three representatives of each of the 21 American republics and to function under auspices of the Inter-American Development Commission with the cooperation of the Pan American Union and the Union of South American Engineers.

The resolution was presented by Dr. Ary F. Torres, of the Brazilian Commission of Inter-American Development, who has been active for a number of years in the promotion of uniform standards in the Americas, and who has assisted the Inter-American Department of the American Standards Assn. in its standardizing program.

The American Standards Assn. for over two years has been cooperating with established standardizing organizations in Brazil, Argentina, Uruguay, and Mexico, as well as business concerns, governmental officials and others throughout the Americas in the promotion of uniform technical standards.

In cooperation with the Inter-American Development Commission,

Basic Divisions

"Basically, industry has two broad divisions—production and distribution," C. L. Wheeler, executive vice president, Pope and Talbot, Inc., declared at a recent meeting of company officials in San Francisco, Cal.

"The keystone to the entire arch is distribution, based on economy of expenditures and the elimination of waste in the distribution system.

"Postwar distribution must be based on efficiency and will be reached by the manufacturer who puts all the scientific 'know-how and selling drive' he can develop into his distribution program . . ."

the American Standards Assn. also has been assisting in the furtherance of part of the same resolution adopted at the May conference, calling for the creation in all American countries, where they do not now exist, of organizations to promote the adoption of uniform technical standards.

Standardized Hemisphere Census Methods Being Sought by Statistical Institute

Predicating its activities on the fact that no modern nation can plan for its future without some calculation on the size and age composition of its population, the Inter-American Statistical Institute is laboring to shape a future statistical pattern for the Western Hemisphere.

The Institute is a professional organization of statistical experts of the American republics, with its permanent secretariat in the United States Bureau of the Census.

Because of the specific importance of national social and economic figures in postwar development plans, these specialists, through technical projects, publications, administrative services, and the interchange of personnel, are seeking to standardize methods of census in the Americas.

Reports of their projects, which should be published within the year, are on the following:

Foreign Trade Classification—the minimum list of commodities in international trade, compiled by the League of Nations, is being adapted for inter-American trade purposes.

Census Surveys—Methods and pro-

Chairman of the planning committee is George Wythe, Chief of the American Republics Unit, Bureau of Foreign and Domestic Commerce. He is being assisted in the technical phases of the work by I. J. Fairchild, Chief of the Division of Trade Standards, Bureau of Standards, and H. B. McCoy, Chief of Industrial Economy, Department of Commerce.

Other members of the planning committee are William Manger, Counselor of the Pan American Union; D. M. Phelps, Associate Chief of the Division of Financial and Monetary Affairs, Department of State; Alberto Magno-Rodriguez, Director of the Inter-American Department, American Standards Assn., and Morton D. Carrel, Projects Director, Inter-American Development Commission.

Tobacco Export Outlook Fair

According to the bureau of agricultural economics the outlook for exports of flue-cured tobacco is "reasonably favorable."

The agency adds that after immediate postwar requirements of Europe have been met a decline in tobacco exports is possible in view of increased production of the commodity on the continent since outbreak of hostilities.

cedures of each nation are being studied to shape minimum standards as a starting point for the 1950 hemisphere census, which will include the locations of industry, extension of agriculture, settlement and absorption of migrants.

Agricultural Production—A survey of methods underlying the agricultural production statistics and crop estimating for a selected list of commodities in a limited number of countries is being made.

Statistical Training Methods and Materials—Groundwork has been started for a survey of statistical training methods and materials in various nations; for a glossary of statistical terms in several languages; and for the preliminary drafting along broad lines of a 10-year program in the field of statistical education.

National Income—A study of the bases for national income estimates in Latin America is being conducted in collaboration with the National Bureau of Economic Research in New York. It will be a continuing function of the Institute, and one of its long-range objectives.

Canada-United States Fur Trade Increases

According to a study of Canada's fur trade made by the Canadian National Railways, the bulk of production, prior to the war, of Canadian furs went to London whereas now, Canada's fur trade is mainly with the United States, and 1942 statistics show that of the entire Canadian undressed fur export valued at \$17,977,000, \$16,869,000 worth went to the U. S. and only \$157,000 worth to Great Britain.

Uruguay Declared Excellent Market

An excellent market for American manufactured goods exists in Uruguay, Raul Capurro, Montevideo business man, declared in a recent address before the Chicago Assn. of Credit Men.

Especially in demand, he said, are American automobiles, refrigerators, railway supplies, industrial machinery and office equipment. This market can be developed, he suggested, if proper advertising and merchandising procedure is followed. Uruguay, he added, will be glad to sell to the United States leather, wool, grain and meats. (Slawson).

Foreign Trade Intentions Seen in Appointment

San Francisco's foreign trade ambitions and plans are underlined by the appointment to the presidency of the San Francisco Chamber of Commerce for the current year, of Dr. Henry F. Grady, internationally known president of the American President Lines.

In his acceptance remarks, Dr. Grady said: "The Chamber has broadened its horizons. It has led in building a workable basis for cooperation between communities of the Bay area, of California, and the West. It is my desire to carry on this good work and through the San Francisco Chamber to extend the city's horizons and influence even further.

"We must build the ground floor for the advent of world commerce, world communication and the interest in world affairs which will follow the war." (Gidlow)

Fruehauf Opens New Export Office

All export activities of the Fruehauf Trailer Co. are now centered in New York City. The export office is located at 30 Rockefeller Plaza, New York 20, and is in charge of R. L. Vaniman, vice president in charge of exports, assisted by C. O. Nelson, export sales manager, and staff. Mr. Nelson has just moved his offices from the factory at Detroit, Mich., to New York.



Sunset on the Amazon

Small Tugs Revolutionize Amazon Transportation

INDUSTRIAL exploitation of the great Amazon valley, and transportation of vital war and economic materials are being vitalized and speeded by modernized and improved river transportation.

The acquisition of small tugboats of 200 hp. of North American construction has revolutionized the system of transportation on the Amazon and its tributaries. The new tugboats are propelled by Diesel motors and navigate waters from seven to nine meters deep, towing cargoes out of all proportion to their size.

It should be remembered that the Amazon is the mightiest river in America, with a basin covering some 4,458,950 sq. mi., dominating the heart of the meridional continent. More than half of Brazil, two-thirds of Peru, almost half of Bolivia, half of Ecuador, and a great part of Colombia and Venezuela are situated in the immense basin. Only three republics, Argentina, Chile and Uruguay, are outside.

At its mouth the Amazon is more than 106 miles wide. Transatlantic boats of more than seven thousand tons can reach the river port of Iquitos, 3,700 miles in the interior of the continent. The hydrographic system of the Amazon includes a great number of smaller canals suitable for navigation, and served by small tug-

boats answering the needs of normal commercial traffic.

Still other North American tugboats are being constructed, designed for the improvement of Amazon navigation. In calm waters they are capable of towing 800 thousand metric tons of cargo at the rate of 2½ mph.; a thousand tons at the rate of 5 miles, and more than 500 tons at the rate of 7 mph.

In river tributaries, such as the Huallaga, the Ucayali, the Pachitea and others that descend from the high Amazon above Iquitos, 100-ton barges are used, which measure from seven to 20 meters in length. They are excellent aids in transportation.

At present, the new tugboats are carrying petroleum from the fields of "Ganzo Azul" on the Pachitea to Iquitos, travelling 650 water miles over the Amazon to Manaoas. Other small boats of 100 hp. are used for the collection of rubber, for the transportation of minerals, and for current cargo on the Beni river in Bolivia, and on the Caqueta and the Putumayo in Colombia. Boats of this type have a crew of seven men, serving efficiently in moving a production whose volume is constantly increasing as the new industrial exploitations in the Amazonian forests advance.

U. S. Foreign Service Strengthened

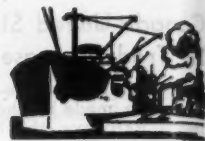
Strengthening of the United States foreign service to guard interests of American businessmen and promote postwar foreign trade has been announced by Wayne C. Taylor, acting secretary of commerce.

Commercial and economic staffs

abroad are being substantially increased, he said.

In 1939 the former foreign service of the Department of Commerce (also that of the Department of Agriculture) was integrated with the foreign service of the State Department.

Waterways and Terminals...



Foreign Steamship Companies Apply For Right to Operate on Great Lakes

At least four foreign steamship companies have made application with the U. S. Maritime Commission to get authority to operate on the Great Lakes as soon as shipping from foreign countries can be resumed, according to Harry Brockel, Milwaukee's port director.

The companies are: Transatlantic Steamship Co., Swedish-American-Mexican Line, Ltd., Swedish-American Line, and several others are expecting to make application to enter the Great Lakes with their vessels. At least two other lines are said to be prepared to call at Great Lakes ports after the war, as soon as traffic can be started again, among them being the Norwegian Fjell Line and the Dutch Orange Line.

Ports from Europe from which such vessels will operate include those in Russia, Finland, the Baltic region and other northern European ports. The entire Great Lakes area would be served by such vessels.

According to Mr. Brockel, the addition of several of the steamship lines mentioned above will witness one of the best periods in Great Lakes shipping business. The Milwaukee Harbor Commission, Brockel stated, has recommended to the maritime commission that American vessels be used in water shipping service to European and other foreign ports as soon as possible after peace comes. (Hubel).

Pacific Coast Firm Reorganizes

Planned to meet the new trend in American commercial shipping which is expected to develop rapidly as the final stages of the war approach, the Inter-ocean Steamship Corp., with head offices in San Francisco, and branches in major Pacific Coast ports, has opened a new Charter and Consignment Department in San Francisco. The office has been placed in charge of Stuart A. Thompkins.

The firm's program also calls for special arrangements to be made for handling matters coming under the Charter and Consignment Department in its offices at Los Angeles, Portland, Seattle and New York, it was announced.

The new set-up was installed following the company's conclusion that indications point to the movement of commercial cargo on a charter basis in full or in part shiploads on Liberty and Victory ships, much of which will be subject to individual negotiation by importers or exporters. (Herr).

New Lake Steamer Planned

An ultra-modern streamlined ship with a capacity of 1,215 passengers and 1,000 tons of freight is being planned by the Detroit & Cleveland Navigation Co., Detroit, Mich., for use on the Great Lakes after the war.

The new vessel, 523 ft. long, with a beam of 70 ft. at the hull and an extreme beam of 87 ft., will have a speed of 22 statute miles per hour, according to James T. McMillan, president of the line. It will be powered by two sets of compound steam turbines of 12,000 h.p. capacity, with four boilers fired by oil.

Up-to-date facilities for passengers will include a 250-seat motion picture theatre, 592 cabins and other accommodations. Freight capacity of 1,000 tons, Mr. McMillan said, is the equivalent of 20 average freight cars, and provides space sufficient to handle 100 automobiles.—(Slawson)

Surplus Materials Use Urged by Commission

The Maritime Commission has instructed its officials and all shipyards engaged in the 1945 ship construction program, that every effort must be made to work into the program all available unrequired and surplus materials located in the building yards and elsewhere.

This action is a development of the aggressive policy followed by the Maritime Commission to utilize existing inventories thereby relieving manpower strains in manufacturing plants.

Tanker Edward G. Seubert Opens the 1945 Navigation Season at Wisconsin Port

The 1945 navigation season opened when the tanker Edward G. Seubert, owned by the Standard Oil Co. of Indiana, docked at Jones Island with 2,100,000 gal. of fuel oil. The vessel's home port is Whiting, Ind.

The cargo aided in augmenting Milwaukee's dwindling coal and fuel supply. Fuel oil has been shipped into Milwaukee during this winter via truck.

The first boat arriving here last year arrived Feb. 1; this year the

New Marine Suppliers Assn. Formed

Great Lakes Marine Suppliers Assn. has been organized by 25 firms, with Bert C. Behnke, Chicago, as president of the group, organized to seek immediate ceiling price relief from the OPA. C. N. McHenry, Lorain, O., was named vice president; O. W. Schnell, Superior, Wis., secretary, and Stephen Jurecky, Indiana Harbor, Ind., treasurer. Henry D. Lindauer, Chicago, was named executive director. It was indicated that Great Lakes marine provisioners are urgently in need of higher markups, it being stated that present OPA price ceilings make it unlikely that any of the marine suppliers will be able to remain in business over the 1945 navigation season. (Kline).

Grain Quota for '45 300,000,000 Bu.

Quota of 300,000,000 bushels of grain for American vessels to move down the Great Lakes during the 1945 navigation season was set by grain interests and representatives meeting in Buffalo, N. Y., March 1. Last year carriers of United States registry transported about 292,000,000 bu., slightly above the amount carried in Canadian vessels. Total for ships of both countries reached the all-time high of 583,888,803 bu. The current quota would indicate that an ever greater grain shipping year is in prospect for the lakes in 1945.

Whether the quota can be met depends on an adequate supply of ships, manpower, and railroad cars to move the grain out of lake elevators, it was explained. It was predicted by some attending the two-day meeting that export shipments out of Buffalo, the leading lower lake receiving port, might be heaviest in history because of the need of grain to feed liberated countries in Europe.

Flat-Top Ferry Building in Cleveland

Stadium Yacht Basin, Inc., Cleveland, is believed to be the first ship-building firm on the Great Lakes to start building vessels for civilian use. Firm is now working on a 90-ton flat top steel ferry designed like an aircraft carrier, with the engine house and cabin on one side, reported the first one of its type to be built on the Great Lakes.

To save turn-around time, the ferry will be built to run backward and forward, having two propellers, two steering wheels, and two rudders. It will be Diesel powered and of all-welded construction. Ferry is being built for Fred Kury, president of the Brockville & Morristown Ferry Co., who said it will reopen prewar service between Morristown, N. Y., and Brockville, Can. (Kline).

Northwestern Stevedoring Co.

Organization of Northwestern Stevedoring Co., Seattle, Wash., which will engage in general stevedoring and dock operation and plans handling air carriers freight, marks the return to the waterfront of Robert M. Morrissey, a veteran of the stevedoring business who retired a few years ago. Morrissey was formerly identified with Rothschild-International Stevedoring Co. and was owner and manager, old Northwestern Stevedoring Co. The new firm was incorporated in (Haskell)

Restoration of Coastwise Shipping May Be Aided By ICC Conferences

General satisfaction has been expressed by coastwise water carriers on the Pacific Coast with the results of discussions held with the ICC in Washington, D. C., recently on plans for resuming ship services as soon as the war emergency makes that possible.

It was also agreed, on the whole,

tempt to resume postwar service, was accomplished.

Representatives from the Pacific Coast who attended the conferences reported that ICC officials evinced a desire to lend every possible aid in outlining an effective program for restoration of water services as soon as it can be done with due regard for the war situation.

West Coast shipping men who attended the conferences included: John Byrne, agent, Pacific Coastwise Freight Tariff Bureau; J. C. Strittmatter, executive vice-president, Olympic Steamship Co.; Raymond F. Burley, freight traffic manager, Pope & Talbot-McCormick Steamship Co.; G. V. Cooley, district manager, American-Hawaiian Steamship Co., and R. J. Ringwood, freight traffic manager, Pacific Far East Line. (Herr).

Maritime Day, May 22

Your Merchant Marine is this year's theme for the observance of Maritime Day. Congress designated May 22 as National Maritime Day in 1933. It commemorates the first successful trans-oceanic crossing by a steam vessel, the SS. "Savannah," which sailed from Savannah, Ga., May 22, 1819, for Liverpool. This will be the nation's fourth wartime observance of National Maritime Day.

that the joint rail-truck-water carrier conference had been successful from the water carriers' standpoint in that the main objective of the meeting, informing the ICC regarding the peculiar problems that will attend the water carriers' efforts when they at-

Expansion Program

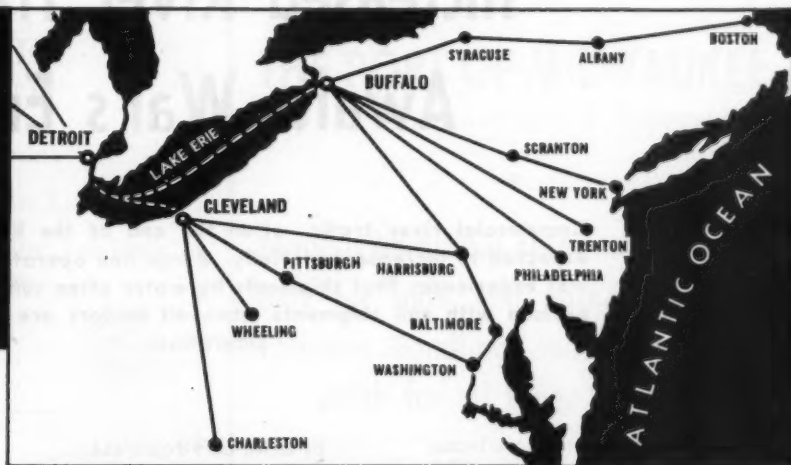
Westinghouse Electric & Mfg. Co. has completed a million dollar expansion program providing for a fivefold increase in capacity for repairing and rebuilding battle-damaged electrical and steam equipment and steam turbines in its Emeryville and Los Angeles, Cal., Seattle, Wash., and Portland, Ore., branches. (Herr)

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VARIETY OF CARGO . . . 1. pipe (before pilot house), 2. dry freight (under tarpaulins), 3. tanks, and 4. empty barges, bound for New Orleans.

Increased River Traffic Awaits War's End

Commercial river traffic, after the end of the European war, is expected to increase materially. Barge line operators believe from war experiences that shipments by water often suffer little in comparison with rail shipments when all factors are taken into consideration.

By L. M. LEFFINGWELL

THERE is going to be much better trade on our navigable river routes for barge shipments after the war. When the European war ends a lot of materials will be made available for commercial uses, Pittsburgh river operators believe.

Once steel is not needed so badly by the Government and is released for civilian uses, substantial tonnages will move downriver from Pittsburgh. Great quantities of steel now are being shipped southwest by the Government, but this is going by rail because of its greater speed.

Barge line operators believe, however, that had their request been heeded for permission to handle more shipments bound for river ports and adjacent areas, relieving the strain on the railroads, the Jan.-Feb. criti-

cal shipping condition might not have occurred.

Water vs. Rail

Indeed, shippers report that shipments arriving by rail frequently are stored for so long a period of time before being used that barges, averaging 15 days to cover the same distance, could have had the steel on hand when needed in ample time.

Thus, transportation by water often suffers little in comparison with rail shipments when all of the factors are reckoned.

This rule of comparison is more likely to be used as commercial shipments increase. Shippers once again will seek adequate transportation at the lowest possible cost.

While rail movement, undoubtedly, is faster, this very fact frequently causes congestion and other delays not encountered by river traffic.

Water Cargo Expedited

Much has been done to expedite cargo movements by water. Last year, for example, the Government, through the Defense Plant Corp., built 21 steam towboats, the largest vessels on the river, that push 12 barge tows which contain roughly 150,000 barrels of petroleum.

Also, DPC built 190-195 steel tank

petroleum barges to aid the war effort and lent them to the Standard Oil Co.

The State of Pennsylvania has created a Postwar Port Planning Commission, hiring the Chester Engineers to survey requirements for a port in Pittsburgh.

ODT permits movement of crude oil north and east on the river, but not west and south except by special permission.

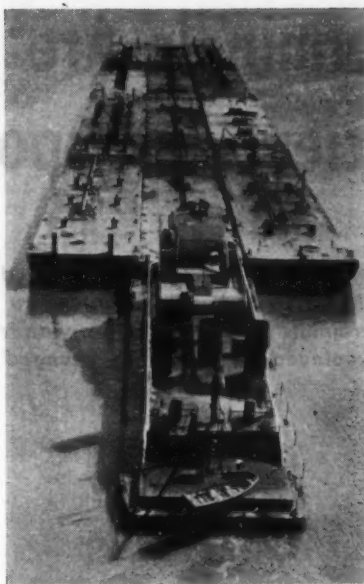
Recently, chlorine was moved on the river by the American Barge Line in specially constructed tanks equipped with special valves which, in case of accident, would enable the barge to be sunk in five minutes, dissipating the noxious effects of the chlorine.

Barge Construction

Much new construction of private boats and barges is in progress in shipyards like Dravo, American Bridge, and also at Todd and Ingalls in the South, where a limited construction program has been begun. We may expect many new vessels on the rivers.

A problem confronting the river industry is to retain licensed men. It requires time to train a pilot to move a tow of scrap iron, steel, or coal speedily along the river.

Barging of coal either has remained firm or has increased substantially over last year. As long as the mills keep up their production, they will need coal from the mine,



Twelve-barge tow pushed by the Sohio Petroleum Co.'s "Sohioan".

and there's no reason why barge movements of coal shouldn't continue very heavy and without interruption.

Weather Conditions

Even the unusual temperatures of

20 above didn't prove serious to the trade in general. Barges simply operated with two-thirds (four instead of six barges) of their tow; took a little more time, a little more steamboat power. When ice backed up at mine tipples along the river, got under barges, a boat was kept around the mine tipples to keep the water occupied. Lake shipments of coal is expected to be no different than last year.

Turnover of river freight is good. The movement resembles last year's traffic. Big movement is upstream representing 65-70 per cent of the total, and comprising largely petroleum, feldspar, sulfur, and scrap iron. This trend is likely to continue, and volume will be heavy. All available towboats are in service.

Heavy Traffic Expected

There is a continuation from last year of the heavy coal movement, especially on the Monongahela River, and extending down the Ohio to Wheeling, W. Va.

There is similar movement in the Huntington, W. Va.-Cincinnati, O., area, and on the Illinois River. Except for some river ice, however, there has been no congestion.

Outlook for commercial shipments appears optimistic. Spring and summer, it is expected, will find a growing demand for downbound traffic.

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Modern Terminals Are Necessary For Efficient Transportation

Just as a barn built 100 years ago for the horse and buggy had to be modernized or replaced by a better structure to house the motor vehicle, so many terminals built to serve pre-war traffic will have to be renovated or replaced to serve the changed requirements of tomorrow.

By **GEORGE F. BAUER**
International Consultant

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STRENGTHENING the weakest link represented by terminals will invigorate the entire operations of steamship carriers and effect economies that can be passed on to shipper and consumer. It is through this kind of action that larger quantities of goods can be brought within buying reach of more people and job-creating activities stimulated in all the fields of production and distribution.

It is of little avail if steamers are modernized, enlarged in size, and provided with the most modern installations to assure proper care of cargo while in transit; neither does it matter much if vast outlays are incurred for extra gear to achieve more efficient operation of steamers, if these advantages are brushed off by straight-jacketed terminals completely unadapted to these innovations.

Just as a barn built a hundred years ago for the horse and buggy had to be modernized or replaced by a better structure to house the automobile, so do many terminals built to serve pre-war traffic have to be renovated and fitted into the changed requirements of tomorrow.

Steamship transport is not an entity in itself; it is only a segment of transportation involved in delivering goods from producers to users in all parts of the globe.

For the over-all picture it is highly vital that goods be brought to steamship piers by the most efficient and economical means, regardless of whether they are carried there by rail or motor carrier. Any waste in manpower or equipment power while carrying the cargo to the terminal is in the last analysis a charge on the consuming ability of people, regardless of whether they are living in the United States or in other countries. If the charges from this waste become excessive, large absorption of goods is impeded to the disadvantage of all commerce.

Of Prime Consideration

Terminal facilities, consequently, merit prime consideration if steamship services are to be placed on a proper economic footing. Strangely, it has not been the larger harbors in the United States that have shown the greatest foresight. Many less

known ports have been among the first to adopt the most modern facilities and equipment for expeditious handling of ocean-bound traffic.

What are some of the facilities that will need be more generously set up to assure best functioning of steamship operations?

There will need to be a review of terminals as they now exist to determine whether they have become obsolete to a degree that makes economic steamship operations impossible, or whether they can be adapted by certain changes to fit in with postwar needs. Many terminals will be found inadequate from a progressive viewpoint and will fall within either of these two classifications.

Location and Coordination

The problem to solve is one similar to that found with housing where such drastic solutions are resorted to as "slum" clearances. Certain terminals used over many years may also have acquired an antiquity that merits complete abandonment and replacement by structures more suitably located, planned and equipped to

meet the needs of present generations.

Location will become important if easy access to the terminal is to be assured. Motor carriers will be relied upon to a degree to bring cargo from the surrounding territory to steamer's berths. Highways ample to prevent traffic congestion that results in costly expenditure from unused labor and equipment, will have to be provided. Coordination between motor carriers and steamship personnel at the terminals becomes important. There is nothing so drastically remindful of waste as a long line of trucks waiting at a pier for a chance to unload cargo and motor truck driver endeavoring to obtain dock receipts covering the shipments that have been delivered by him.

Some improvement on this score to permit fuller use of motor carrier equipment and personnel would make for economies that will benefit the competitive ability of numerous exporters in foreign markets and bring down to prices that have to be charged on imported goods purchased by American consumers.

Rehandling Waste

A great deal of cargo for transport by steamer is hauled to the terminals by railway. Any excessive rehandling of goods from time of departure until arrival at steamship terminal involves a needless expense. Even if this expense is absorbed by railways, as occurs with lighterage charge in New York harbor, the cost, nevertheless, is there and has to be included somewhere along the line in the price of goods to final purchasers.

Any unnecessary cost in transport no matter by whom absorbed tends toward more expensive products and for that reason should be reduced or eliminated, if possible, to assure a larger total commerce from which all groups will benefit.

At some terminals, economic links between rail transport and steamship operations are provided as a result of belt lines which permit freight trains to move in along side of the warehouse for transfer into them of out-bound cargo, or to receive goods destined for interior points in the United States.

Railway connections with double tracks which permit this access of freight trains to the sides of warehouses at port terminals obviate the necessity of rehandling or additional transfers that are costly from the viewpoint of shippers and have to be included in the final price of goods.

Handling Equipment

With the railway freight trains alongside of the warehouse at the port terminal, the next problem involves unloading the cargo from the car and transferring it into the warehouse.

Proper platforms, fork trucks, conveyors and similar equipment may be needed to assure greatest economy in this operation. In some instances, there will be need of special installations depending on the product. Equipment adapted to ore, grain, bananas, and coffee fall into this class. These systems have been excellently worked out and suggest adaptations to other products of standard kind going into world commerce.

The palletized system of materials handling can come in for wider utilization, especially as closer coordination is perfected among producers, transport groups and consignees.

Use of Pallet Loads

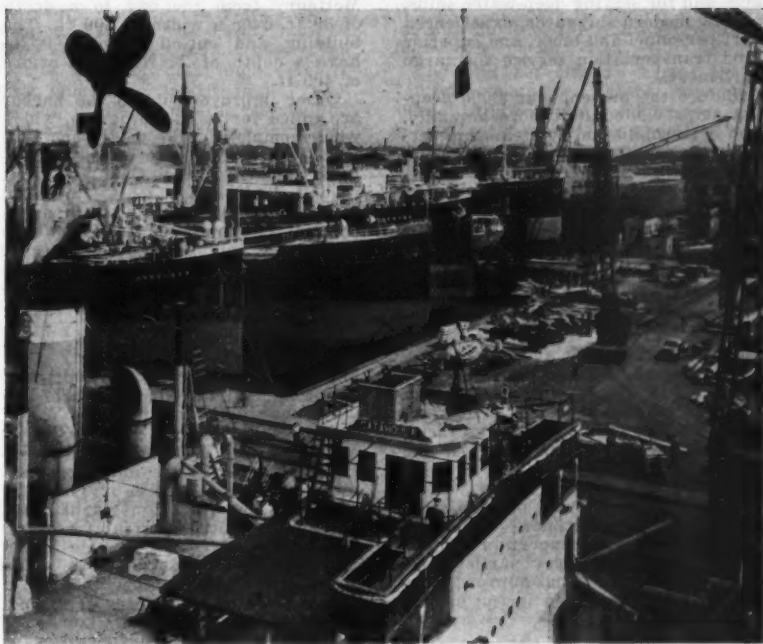
In world trade, the day may not be too far off before many goods in standard cases are stacked on pallet platforms within the factory of the shipper and moved palletload with fork trucks to the interior of freight cars, out of the latter into warehouses at seaport terminals, hauled into the holds of steamers and delivered still on the original pallet platform to the final consignee abroad. Avoidance of numerous handling operations would result in attractive economies.

For surface transport, the weight of these pallets would be a minor factor as both railroads and steamers frequently move with cargo fully absorbing the cubic contents, but only partially taking up the weight carrying ability.

Pallets for surface transport, consequently, will need to be devised in such a way as to absorb a minimum of cubic measurement space. This necessity comes from the fact that the steamship ton charge assessed on goods is determined by not so much the 2250 lb. in a weight ton as it is by the 40 cu. ft. of space displacement. Any reduction in space occupied by pallets, therefore, tends to reduce the steamship charge on many types of goods moved on pallets, and encourages greater use of this method by more shippers and consignees.

Ample space within a warehouse becomes vital with modern methods

(Continued on page 111)



View of Port of Baltimore

Baltimore's Increased Activity And Postwar Prospects

Total exports and imports in 1944 were approximately 150,000 carloads of general and bulk freight, excluding coal. War Department shipments showed an increase of 170 per cent over 1943. Congress has appropriated \$2,538,000 for harbor improvements, and steamship lines are planning larger and improved facilities.

By JOHN F. IGNACE

BETWEEN 40 and 50 steamship services have operated in Baltimore for the foreign and domestic trades, and have helped to make the city and port of Baltimore an important factor in the waterways activities of the nation.

It is interesting to note that the Port of Baltimore has helped to preserve the city's economic balance through the years and has contributed in no small degree to the city's national and international position.

The record establishment by the Port of Baltimore in the port's development and that of the city should be taken into consideration in the postwar plans for Baltimore. This was well demonstrated and organized and recognized at the close of World War 1 when the business leaders of

this city set into motion the first systematic and practical port expansion program to be employed in any large seaboard city. Through 25 years that program has paid large dividends and has considerably increased the activity and importance of the port.

Strategic Port

Baltimore has a strategic port location, midway on the Atlantic seaboard. It is the closest of the eastern ports to inland cargo areas and to the center of population. This geographic factor, reflected in an advantageous rate structure is the cornerstone of the Port of Baltimore's shipping position.

This is supported by good port and terminal equipment facilities for handling all general and specialized car-

goes and for serving deep-water ships, also by modern shipyards, experienced port personnel and labor, and superior land transportation service for cargo movement.

Before the present war 4,000 deep-sea ships visited Baltimore annually, and between 40 and 50 steamship services operated here in the foreign and domestic trades.

Quicker Service

It is encouraging to note most of the pre-war steamship services plan to be back in the postwar period, when shipping services will be greater than they have ever been. One thing is certain: these services will employ more efficient and quicker service. The advantages now known as provided in the market and Port of Baltimore, are expected to be enhanced considerably. The port's facilities are scheduled to be enlarged and extended, all bound to help for efficient services such as are or will be needed in the postwar period.

Furthermore, Baltimore's industrial and merchandising importance should provide a much larger participation in local importance and improve much more than it had been in the past.

Harbor Improvements

The omnibus rivers and harbors bill, provides for Baltimore harbor improvements totaling \$2,538,000.

The principal project involves the dredging of the entire channel to Fort

McHenry from the bay to a depth of 39 ft. over a width of 600 ft. The building and cut-off channel is to have a depth of 27 ft. and a width of 400 ft.

Other improvements to the harbor are called for in this program, which when completed will vastly increase the value of the port of the Chesapeake and Delaware Canal, in that it will eliminate a long trip down the bay before turning up again toward the canal. It has long been needed and will shorten the distance and running time between Philadelphia and Baltimore. Thus it will attract more business, here.

Air Cargo Possibilities

Changes in overseas transport will result from the system of world airways now in the making.

This will prove a great asset in enhancing the port's use and operations. The extensive and large terminals which are here by virtue of the large and important trunk lines, are and will become great factors in promoting waterways facilities. They will enhance these facilities and make Baltimore a more important waterway than it has ever been. The Port of Baltimore will become a more vital factor in waterway transportation.

War Shipments

While regular commercial activities, because of the war and the disrupted normal activities which have

featured the port's activities, have declined somewhat, shipment of war supplies have increased considerably.

Baltimore's export shipments during 1944 increased 65 per cent and the War Department shipments showed an increase of 170 per cent over 1943.

The port's unusually good record for turnaround and dispatch is largely attributed to the excellent labor performance and utilization and to effective labor-management cooperation.

In shipping 170 per cent more army material through the cargo port of embarkation, here, the port did not find it necessary to use any military labor and all loading operations were handled by local agencies.

Other Factors

Other factors included efficient railroad terminal operations co-ordination among steamship and port service agencies and Federal departments and smooth integrations of the army cargo port of embarkation into the general picture.

The total of railborne exports, almost entirely made up of war supplies to the battle fronts, lend-lease materials and relief shipments was approximately 4,000,000 tons, and 1,000,000 tons of imports of critical commodities were handled by the port.

Total exports and imports in 1944 were approximately 150,000 carloads of general and bulk freight, excluding coal. Exports alone totaled 105,230 carloads.

Use of Materials Handling Equipment Urged To Reduce Loss and Damage Claims

INSTALLATION of materials handling equipment at railroad freight stations has contributed greatly to the reduction of damage to heavy machinery shipments, the Harnischfeger Corp., Milwaukee, Wis., has established. Addressing the Freight Loss and Damage Prevention Committee of the Midwest Shippers Advisory Board in Chicago recently, G. A. Schmus, traffic manager of the Milwaukee concern, declared that the railroads "have seen the light" and that equipment for handling the heavier loadings is being placed in freight houses as rapidly as conditions permit.

"About a year ago," Mr. Schmus related, "a railroad president was in my office and we were discussing this materials handling situation. More or less as a joke I told him I could go to my shipping department and take a shipment weighing five tons and put it on a truck in a minute. He laughed.

10,000 lb. Package

"We went down to the plant where we had a package weighing around 10,000 lb., ready for shipment. It took

the shipping department less than a minute to put it on the truck. I told him it would take six men an hour and a half to unload that same box. We drove over to the railroad freight house, I don't remember whether they had six or seven men, but it took better than an hour to unload the box and then they only had it on their platform."

Loss and Damage Less

In the handling of machinery over a period of years, Mr. Schmus said, it had been noticed that at certain points an epidemic of loss and damage would break out. In trying to determine the reason attention was first given to packing methods to make sure that they were satisfactory.

"One after another," he said, "the troubles along the line were eliminated until today the machinery industry has relatively little difficulty. One thing that helped was the action taken by the railroads in acquiring materials handling equipment to take care of unusual situations."

Referring to the campaign of Army and Navy authorities to improve the

packing methods of manufacturers who are providing war supplies, Mr. Schmus said that while the faults revealed by the experts have been followed by corrective measures, "the armed forces at length came to realize that they were not up to date in their materials handling methods."

"They then took steps to correct their own weakness wherever possible," he said, "with the result that today at practically every port there are mobile handling units which can be moved into position to handle loads of any size. The Army and Navy have found that this alone has reduced loss and damage to a great extent."

Heavier Loading

Heavier loading of freight cars is demanded today, he pointed out, a condition which entails the risk of heavy loss and damage.

"If that problem can be partly answered by proper materials handling equipment," he declared, in concluding, "then the solution of our current heavy loss and damage experience is at hand."

C. H. Dietrich of the Freight

Claims division of the Assn. of American Railroads, speaking at the same committee meeting of the Midwest Board, revealed that for a number of months he had stationed men with cameras at important freight transfer points to take photographs of shipments arriving in damaged condition, especially when this damage was attributable to inadequate packaging.

1,000 Pictures

In half a year's time, he said, he had sent approximately 1,000 such pictures to the shipper involved, addressing them, not to traffic manager or packing department, but to the ship officer.

"In nine cases out of ten," he said, the result was that they discovered

that they could do a better job of packing. I feel that every one of those 1,000 reports has not only taken care of the particular damaged shipment, but has resulted in an overhauling of their packing method on that particular line of goods, which will be reflected in future shipments.

Slow Proposition

"It is a slow proposition, however and with our small force out on the job of taking pictures we are only scratching the surface. We are trying now to have the claim prevention officer of the various railroads equip their own people with cameras, because we feel that a picture will tell more than anything you can write.

We also propose to follow this up by getting the information to the fellow who packs."

The Midwest Board's Claim Prevention committee, before adjournment, ratified a plan calling for organization of committees composed of railroad agents, shippers and receivers in the Midwest Board's territory, whose function will be to work for elimination of freight loss and damage in their respective communities. This would be done through meetings and conferences and personal contacts with local shippers and receivers, along the lines used so successfully by the earlier established Vigilance Committees in their efforts to speed up the handling of freight cars by consignees. (Slawson).



Scene of Belem waterfront, mouth of Amazon River, one of the busiest and most important Brazilian ports, and key to coastal defense.

Press Assn.

Belem's New Dikes Prevent Floods, Protect Health

AFTER more than two centuries of almost amphibious existence, Belem, chief port and portal of Brazil's great Amazon valley, is getting a feet out of the water for the first time.

This notable achievement is the result of a \$500,000,000 dike system built by the joint efforts of the Brazilian and United States governments, whose representatives collaborated in a recent dedication ceremony. It is one of the largest public health construction jobs in Brazil, if not in Latin America, and has already reclaimed acres of swamp land for the city.

The impelling reason for the dike system, however, was not to reclaim land. It was to save lives. It was conceived by Brazilian and United States doctors, as a major effort to eliminate malaria and other tropical diseases that have scourged Belem and environs throughout its history. It was built literally by the hands of thousands of Brazilian workmen, because of wartime scarcity of machinery.

Belem, nautical and economic gateway to the Amazon region, also is an important aerial crossroads. Planes flying the international East

Coast route between North and South America call there, and branch lines lead upriver to Manaus and beyond. Rubber, vegetable oils, Brazil nuts and other Amazon products funnel through Belem, as to war-vital mica and quartz from areas to the south.

Belem is not really on the Amazon. The port lies a short distance inland from the Atlantic, on the south bank of the Para river, the southernmost arm of the maze of waterways that constitutes the estuary of the Amazon. Situated on a rounded point, the city presents several miles of low shoreline to the river in almost direct line with the sea. Thus a considerable part of Belem has always been vulnerable to twice-a-day tides that sometimes run 14 ft. high.

During the rainy season, rainfall at the rate of a phenomenal 120 in. a year deluges the city. The result has been that for almost half the year Belem was practically awash. The superabundance of water provided so many breeding places for mosquitoes that malaria control was almost impossible. A system of canals, many of which were natural channels called "igarapes," partly drained the city, but couldn't keep pace with the tides and torrential rains.

With the beginning of the war, United States authorities took a keen interest in the problem, particularly after the United States Army, under an agreement with Brazil, built an airfield in the Val de Cans section of Belem. The agency that assumed responsibility for the health project was the Servico Especial de Saude Publica, financed with appropriations from both the Brazilian and United States governments. The SESP is staffed by personnel of both countries.

Construction of the dike system began in September, 1942. The first work was done under contract by a Brazilian engineering company. In November, 1943, SESP assumed direct supervision of the project and completed it under direction of its own engineers.

The completed dikes are almost four mi. long, from three ft. to 20 ft. high, and wide enough at the top to support the single-lane automobile roadway that runs the length of the system.

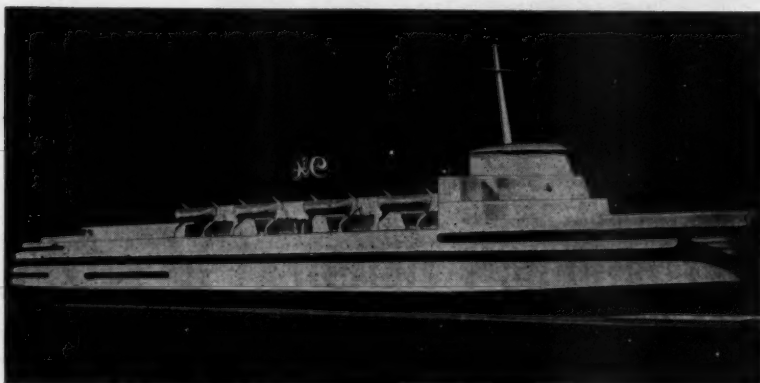
Engineers, workers and officials overcame almost heart-breaking discouragements and difficulties, further complicated by wartime lack of equipment and materials. As many as 2,300 Brazilian laborers at one time

worked waistdeep in water with only hand tools, ox and donkey carts, and a few trucks as their equipment. Tons of the earth in the walls that now shield Belem from the sea were hauled into place in wicker baskets carried on the heads of workmen, in traditional Brazilian fashion. Tons of rock had to be hauled from across the bay in barges and sunk into place as foundations for both dikes and drainage ditches, to overcome the numerous cave-ins of the porous loamy soil.

The double problem of keeping out the tides and letting out the rain water was solved by an ingenious system of floodgates. These gates, 48 or 52 in. wide, are fixed in the dikes at the heads of drainage canals that lead to the Para River. All the gates swing outward on opening, and each is delicately balanced. The pressure of the incoming tide closes them, so that the tide continues upriver past the dikes. When the tide is out, the pressure of accumulated rain water forces the gates open and drains the fresh water into the river. This

drainage system has been improved by straightening and widening the canals, and laying concrete linings about halfway up the V-shaped sides. Grass has been planted on the sides of the dike itself to control erosion.

SESP authorities have traced a downward trend in the incidence of malaria in Belem, which they attribute largely to the dike system. They are confident that the dikes will contribute greatly to the reduction of malaria, but they cautiously refrain from predicting the elimination of the disease. For one thing, malaria in this area is spread principally by two species of mosquitoes, one breeding in salt water and the other in fresh water. The SESP doctors are not entirely sure whether drainage of the salt water marshes may not be followed by an increase in fresh water breeding places in the same areas. However, they find encouragement in the fact that the sub-surface water table in much lowland around Belem has dropped several feet since the dikes went into operation.



Model of SS. Greater Buffalo

Modern Trend in Lake Steamers

TO many postwar plans for improvement of the nation's transportation facilities can now be added current Detroit & Cleveland Navigation Co. plans for replacement of the steamer Greater Buffalo, requisitioned in 1942 by the War Shipping Administration and converted into the U.S.S. Sable, Aircraft Training Carrier.

Gibbs and Cox, internationally known firm of naval architects, have prepared the plans for this replacement vessel. Model of the proposed new ship exhibits the sleek lines and trimness that characterize the modern trend without departing from the stability that is traditional in great ships.

The proposed ship, according to information released by James T. McMillan, president, Detroit & Cleveland Navigation Co., will have an over-all length of 523 ft.; beam at

the hull, 70 ft., and extreme beam 87 ft. She will be of twin screw type with 12,000 shaft hp. generated from two sets of compound steam turbines. The four boilers will be oil-fired. Speed will be 22 statute mph.

Study of specifications relating to passenger accommodations for sleeping, dining and recreation reveal that the proposed ship will be thoroughly modern. Passenger capacity is rated at 1215 to be accommodated in 592 rooms ranging from three-person deluxe rooms (with bath) to two-person Pullman type rooms (with toilet and lavatory). There are five decks—a dining room seating 300 at one time, a cafeteria, men's bar, women's lounge, club cafe, 250 seat motion picture theatre, covered promenades and sun deck.

Mr. McMillan points out that every attention has been paid to the matters of inherent stability in the ship

and the greatest safety for crew and passengers.

All D&C ships in the past have featured express freight accommodations and have been designed to meet public convenience by carrying passengers' automobiles. The new ship has, in addition to full passenger load, a freight capacity of 1000 tons, and will accommodate 100 automobiles.

Cleveland Terminal Co. Incorporated

Nicholson Cleveland Terminal Co., Cleveland, O., has been incorporated by the Ohio Secretary of State's office at \$250,000 by Jay P. Taggart, Paul H. Keogh, and John J. Czyzak.

The William P. Nicholson interest of Detroit recently purchased a large automobile and freight terminal on the Cleveland harbor front at the foot of E. 54th St., and it is expected to be used for unloading new automobiles moved by ship from Detroit in the postwar period.

Ship Loading Problem Serious in Seattle

Men in the naval and auxiliary services are aiding civilian shipping and the loading and unloading of vessels on the Seattle waterfront, serving to piece out the manpower shortage and dearth of shipping handlers. The sailors, moreover, are aided by soldiers, and marines and merchant seamen in droves help out, while they are between ships or during "waits."

Besides their valuable aid in the war effort and the movement of material and merchandise, as well as food commodities, they earn extra money. Doing general stevedoring work, they receive \$1.10 an hour for straight time, and \$1.65 per hour for overtime.

Greatest need for such longshore help has been in the daytime and so glad to get them has been the warehousemen's and longshoremen's union, that this body has not demanded dues, but has given them temporary permits to work, after showing pass that they are on leave and their social security card. . . . (Litteljohn)

Truck Ferry Service On Lake Michigan

Truck ferry service across Lake Michigan has been proposed in an application before the Interstate Commerce Commission. Principal service would be provided daily between Muskegon, Mich., and Milwaukee, Wis., and secondary and irregular service would operate between Grand Haven and Holland, Mich., and Milwaukee.

The applicants are Harry Priebe and D. E. Daggitt, Benton Harbor, Mich., filling station and petroleum truck operators, who would do business as the Lake Michigan Transit Co. Applicants told the commission they planned to acquire a 335-ft. vessel having a capacity of 50 semi-trailers, and estimated gross revenue at \$1,750 a round trip. (Kline).

Accelerated Depreciation Of Structures

Study should be made of the depreciation problem to determine how far accelerated depreciation would go in stimulating a volume of construction up to the potentials of the industry after the war, and whether it would encourage the expansion of small business and venture money in broadening enterprise.

By WILLIAM MUIRHEAD
President
Associated General Contractors
of America

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line method is followed by the Bureau of Internal Revenue in determining exemptions from taxation which may be charged to depreciation. By this method, the structure is assumed to have a useful life of a definite number of years arrived at by a table which has been prepared for many types of structures for various purposes. Each year a fixed sum is allowable for depreciation.

For example, for a building which costs \$100,000 and is assumed to have a useful life of 40 years, \$2,500 annually is allowable for depreciation. By the end of the assumed life of the building the owner would have been permitted to recover the cost in equal installments.

The proposal for study would permit the owner of the \$100,000 building which is assumed to have a useful life of 40 years, to recover from its earnings \$50,000—or half the cost—in ten years, or the first quarter of its life. For these years the rate of permissible depreciation would be \$5,000; and the rate for the remaining 30 years would be \$1,667.

The first quarter of the life of a structure is the period in which its usefulness can be foreseen most clearly. It is believed that if an owner were permitted to secure the return of half his investment during this period it would be a strong stimulus to new construction and expanded business ventures after the war.

A system of accelerated depreciation would be more of a stimulus to many kinds of privately financed construction and business undertakings than the straight line method. It is recommended that owners who would

prefer to use the straight line method be allowed to do so.

Industrial Construction

In the postwar period American industry is being looked upon to provide a large volume of employment. Much thinking is devoted to how to stimulate expansion of industry, with its consequent increase in employment.

Much of the thinking which has been devoted to depreciation of new machinery could be applied equally to much industrial construction.

Two recent suggestions for depreciation of machinery are cited.

Mr. James F. Byrnes, Director, Office of War Mobilization, in his report to Congress on Sept. 9, last, said in part:

"We should consider, also, the advisability of allowing manufacturers to depreciate new machinery substantially in the years in which such machinery is purchased. Great Britain has incorporated such a plan in its current budget. This action would induce many companies to hazard new ventures, thereby increasing employment. It would give a real incentive to companies to keep our industry ahead of the rest of the world technologically. It would provide a steady domestic market of substantial proportion for capital goods and would go far to provide a stable basis for employment in that field in the postwar readjustment."

The House Special Committee on Postwar Economic Policy and Planning in its report of Sept. 8, last, said in part:

"Many corporate and noncorporate businesses feel that they should be permitted greater latitude in making annual allowances for depreciation. If such charges are made against the actual costs of the assets to which they apply, there can be little difference to the government in the long run whether such assets are written

THE Associated General Contractors of America, Inc., recommends that study be given to accelerated depreciation of structures as a stimulus to privately-financed postwar construction.

Specifically it recommends that study be given to permitting owners of structures built after the war to elect to depreciate one-half the cost of the structure in the first quarter of its useful life.

The association believes that study should be made of the depreciation problem to determine how far accelerated depreciation would go in stimulating a volume of construction up to the potentials of the industry after the war, and encourage the expansion of small business and venture money in expanded enterprise.

Postwar Estimate

It is estimated that the industry will have the capacity to execute up to \$20,000,000,000 worth of construction annually by the end of five years after the war. This would provide employment directly at the site for approximately 4,000,000 people, and indirect employment off the site for an additional 8,000,000 people. The association believes that everything possible should be done to reach those potentials.

It appears to the association that the alternative of permitting the owner of a structure to depreciate half the cost in the first quarter of the useful life of the structure would increase revenues to the Treasury, and would stimulate new construction by allowing potential purchasers of construction to secure the return of a large part of their investment during a period of time in which they could with relative clarity foresee a profitable return from their investment.

Accelerated Depreciation

At the present time, the straight

off slowly or rapidly. The ability to amortize assets rapidly should provide an important stimulus for the purchase of new and more efficient equipment and thus assist in the attainment of high levels of productive employment. The committee recommends that this proposal be given serious consideration by the joint committee."

Construction Progress

In recent years tremendous progress has been made in efficiency in design and construction of industrial and manufacturing facilities.

In many instances of war production it was found, for example, far more quick, more economical and more efficient in every way to construct an entirely new plant designed especially for the manufacture of a particular weapon by a specific mass production method than it was to try to adapt an existing factory building for the purpose.

Great strides have been made recently in designing and constructing factories and other facilities specifically

for particular manufacturing operations. In the competition which can be expected after the war between manufacturers, it is logical to assume that so far as possible structures will be modernized or new ones will be built especially for various processes.

The association believes that it would be a stimulant to industrial construction to permit manufacturers to depreciate the costs of factory structures and facilities more closely in line with the profitable use of the structure or facility than according to how long the structure will last.

The association believes that any study on the depreciation of industrial machinery should also include the structural facilities necessary for the manufacturing operation. In the new synthetic rubber and high octane gasoline plants, for example, it is difficult to distinguish between what might be considered machinery and what might be considered structural facilities. Should the machinery be removed, the remaining structure and facilities would have little value other than scrap.

One other advantage which accelerated depreciation of structures would have is that it would increase the depreciation when earnings in most cases would be highest and maintenance and repair costs normally would be lowest; and reduce allowable depreciation when maintenance and repair costs would be higher and income might be lower because of the increasing age of the structure.

Such a method of depreciation would be simple to calculate and administer. It would take some of the risk out of investment in modern structures and facilities. It could act as the incentive to invest funds which otherwise might remain idle.

For each job created at the site of construction, from two to two and a half other regular jobs at regular pay are created off the site. The association believes that careful study should be given to the proposal which would stimulate investment in construction, would cost the government nothing in loss of revenue over the useful life span of the structure, and would lead to an increase in gainful employment.

The Problem of Cartels

(From an editorial in the New York Times)

THE existence of national and international cartels in the post-war world will present a serious problem. No matter what policy we ourselves adopt, it is probable that our importers and exporters will find themselves confronted with buying or selling monopolies in certain countries or in certain lines. The question will then arise whether our Government should permit corresponding import or export monopolies for defensive purposes, and whether it can safely do this without fostering aggressive monopolies which will in turn lead to retaliatory measures on the part of other countries. Questions will also arise regarding the kind of cartels that originate through the exchange of patents. Is the Government grant of patent monopolies in itself desirable? If it is, what is the objection to cross-licensing of patents? If Government supervision is needed, precisely what kind should it be?

These are real problems which need careful study. The vehement and sweeping condemnation of cartels in some political quarters does not help to solve these problems. The other side of the question is now presented in a pamphlet by Prof. J. Anton de Haas of Harvard University, "International Cartels in the Post-War

World," published by the American Enterprise Association. Professor de Haas makes some good *ad hominem* arguments when he points out that opposition to cartels is inconsistent with our high-tariff policy, with our restriction program on cotton and with the international wheat agreement to which our Government is a party. His own suggestion is that cartels and combines be approved in principle, but that they be compelled to register their agreements with some Government commission and be subject to its approval.

Unfortunately, the greater part of Professor de Haas' pamphlet is as one-sided as some of the arguments he attacks. He constantly insists that "free competition will lead to chaos." He fails to recognize the essential role that free competition must play for the very functioning of a system of free enterprise. It is the attempt to "stabilize" prices arbitrarily, the attempt to restrict production, the attempt to keep inefficient high-cost producers in business, that leads to "chaos"—as the history of the British rubber restriction and the American cotton restriction programs so sadly illustrates. Moreover, if the essential self-regulating mechanism of free competition is not allowed to operate, we are driven to Government

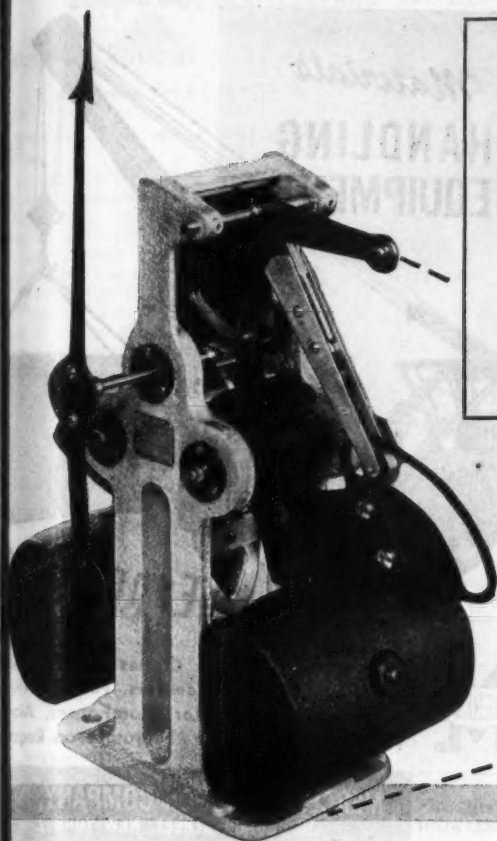
domination and control as the alternative. Professor de Haas seems to recognize this. For he writes: "The answer to all this is control. . . . Free competition is not the answer."

This reminds us of the warning of F. A. Hayek in "The Road to Serfdom": "The modern movement for planning is a movement against competition as such, a new flag under which all the old enemies of competition have rallied. . . . What in effect unites the Socialists of the Left and the Right is this common hostility to competition and their common desire to replace it by a directed economy." The planning against which all his own criticism is directed, Professor Hayek adds, is "solely the planning against competition—the planning which is to be substituted for competition."

In this lies the danger of cartels. In this lies the reason why, though it may be necessary to make certain exceptions (as in the case of patent monopolies or purely defensive combinations), our main effort should be to keep competition vigorous, to depend upon it as the main regulator of supply and demand and of private enterprise, and to frame laws that will allow it to work as effectively and beneficially as possible.

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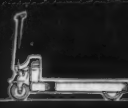


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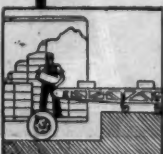
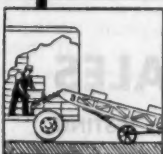
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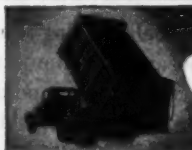
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Northeast Passage . . .

(Continued from page 24)

population with rising standards of living.

It was pointed out that competition of water carriers using the seaway might force the railroads to reduce their freight rates, a condition which would increase the amount of traffic carried by the railroads.

Though the Great Lakes are closed for nearly five months every winter due to ice in the channels, the seven months during which navigation is possible, from mid-April to mid-November, are the months when farmers ship their crops to market and when demands for transportation facilities are greatest. Supporters of the project say that the seaway will divert into our national transportation pattern, relieving the strain on the railroads during the peak period.

Coal Assn. Opposition

One of the bitterest opponents of the project is the National Coal Assn., representing bituminous coal producers. They charge that the seaway would permit British and Nova Scotian producers to invade the present Canadian market for United States coal and reduce railway coal consumption in the United States. Further, if power is developed by harnessing the flow of the St. Lawrence and Niagara Rivers, instead of by building steam-generating plants, a potential market for coal will be lost.

In answer to this, Sen. Homer Ferguson of Michigan pointed out that construction of the seaway would increase the freight capacity of the St. Lawrence canal system by 16 million tons a year. About 10 million tons of this would be available for United States traffic, so that only 6 million tons would be left for Canadian traffic. He said it obviously would be a physical impossibility for British and Nova Scotian producers to ship 10 million tons of coal a year through the seaway into Ontario markets, as the coal association asserts they would do if the seaway were completed. "There is no such market to invade," he declared, "and American coal is cheaper in Ontario than either British or Nova Scotian coal."

Though the amount of coal which the railroads would use might be somewhat reduced, Sen. Ferguson said that if, 25 years ago, producers of oats had opposed the manufacture of automobiles on the theory that the new gasoline buggies would displace horses and thereby reduce the market for oats, their position would have been no more absurd than the stand of the coal producers on the St. Lawrence issue.

Far from reducing coal consumption, the St. Lawrence-Niagara hydro-development would increase it, if the experience in the Southeastern States since the creation of the Tennessee Valley Authority is any guide. The development of cheap water power under public auspices had the effect of increasing the total indus-

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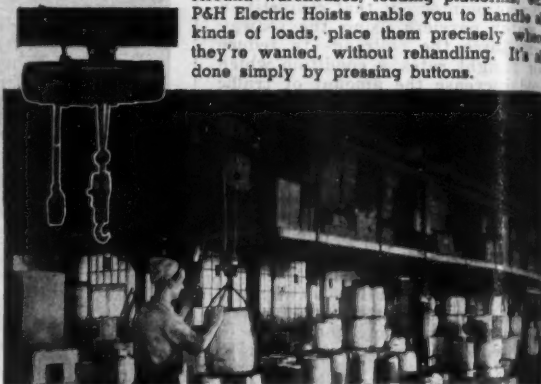
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trial demand for electrical energy, thus increasing the market for coal for industrial use. Connected with the cheaper transportation, the cheap power which would be made available in the Great Lakes Basin would stimulate industrial expansion, and bring larger markets for coal.

Other Opposition

Another opponent of the project is the Maritime Assn. of the Port of New York, which recently filed a statement with Gov. Thomas E. Dewey and the New York Legislature, characterizing the seaway proposal as bound to have a ruinous effect on American shipping in the overseas trades and as a serious menace to the state of New York.

The group said the project would divert traffic from railroads, steamship lines, and inland waterways; would increase unemployment affecting railroads, coal mines, seamen, longshoremen, and labor in many industries; and would impair the fulfillment of the policy of Congress to foster the development and maintenance of a merchant marine for the transportation of the commerce of the United States on essential trade routes. Other objections were that the cost was underestimated and the proposed waterway would be dangerous to navigate.

Gov. Dewey's Advocacy

However, Gov. Dewey has declared

that if the federal government is unable or unwilling to proceed, the state of New York itself should undertake to complete the St. Lawrence project

Demurrage Order

In a move to speed the loading and unloading of box cars, the Interstate Commerce Commission is reinstating an order (No. 242) that provides heavy demurrage charges. The action, announced recently, became effective April 1. The same order was in effect from Oct. 19 to Dec. 1, 1944. Unless canceled sooner, it now will remain in effect until Oct. 1.

The order provides these demurrage charges after the free time allowed by railroad tariffs: \$2.20 a car a day for the first two days; \$5.50 a day for the third day; \$11 a car a day for the fourth day, and \$16.50 a day for each succeeding day.

J. Monroe Johnson, director of the Office of Defense Transportation, said that freight movement in this country is in critical straits with no relief in sight.

"American transportation has been called the 'miracle job' of this war, but even miracles have limits and it appears we have reached those limits," he said.

on a self-liquidating basis, in cooperation with Canada and the Province of Ontario. (See his address to opening session of Legislature, Jan. 2, 1945.)

Gov. Dewey declared, "For years I have advocated the completion of the St. Lawrence seaway and power project. Its beneficiaries would be the residents of this state and nearby areas. . . . The incomparable resources of the St. Lawrence River should no longer be wasted."

Brockel's Support

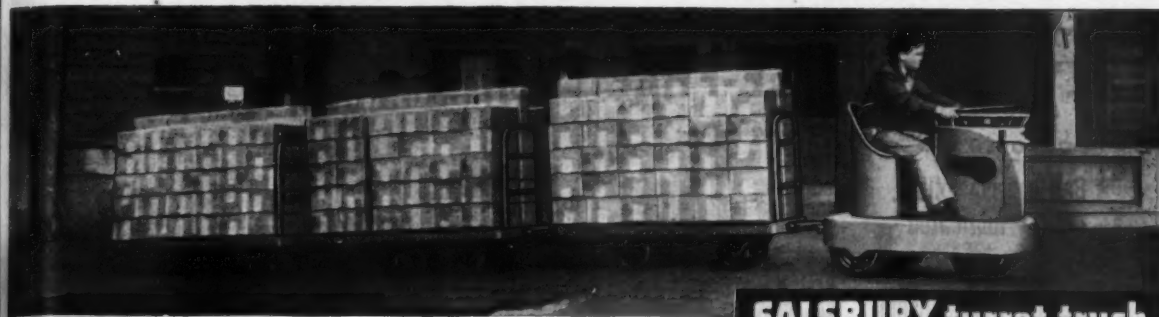
One of the leaders in the seaway fight is Harry C. Brockel, Milwaukee's port director. He points out that though the project has traditionally been considered a power and navigation project, recently, developments have added a third phase—that of national defense.

"I contend that the St. Lawrence seaway is essential to national defense," he stated. "Only about one per cent of shipbuilding production during the past five years has been built on the Great Lakes, despite the industrial character of the region, its reservoir of skilled workmen, and the fact that it is the nation's center of steel production."

"Ships unquestionably could be built on the Great Lakes at lower cost than at many seaboard ports, in view of the fact that many of the component parts of our merchant and

(Continued on page 75)

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Northeast Passage . . .

(Continued from page 72)

naval fleets are constructed in the Middle West, and then transported to ocean ports by costly rail transportation. This not only adds to ship-building costs, but creates traffic congestion on the railroads during the war period.

"If a 27 or 30-ft. channel were available through the St. Lawrence River, Liberty ships, 10,000-ton cruisers, heavy destroyers, and escort carriers, together with all types of smaller naval and merchant craft, could be constructed in Great Lakes harbors.

"These vessels could be armed and provisioned at Great Lakes ports, and convoys could be assembled in the safety of inland waters. In the event of future operations in a European theater of war, the ocean crossing via the St. Lawrence route is approximately 1,000 miles shorter than the crossing from New York, and the hazards of the voyage could be proportionately reduced.

"Future national defense also implies location of strategic industries in the sheltered interior of this continent, where they will be relatively safe from threats from the sea or by long-range robot bombing. If strategic industries are to be so located, they must have access to the best transportation facilities available for receipt of raw materials in quantity and for shipment of their finished goods. This again implies removal of the St. Lawrence bottlenecks," Mr. Brockel explained.

Raw Materials Angle

Another argument also was advanced by Mr. Brockel: That during this war the nation has depleted its sources of essential high grade raw materials—iron, petroleum, lumber, and metals. "We shall have to look to foreign sources for these commodities, not only to maintain ordinary industrial operations, but also to conserve present supplies for future emergencies. We obviously cannot move the great American steel plants from Chicago, Detroit, Cleveland, and Buffalo, so we must bring the ore to the industry."

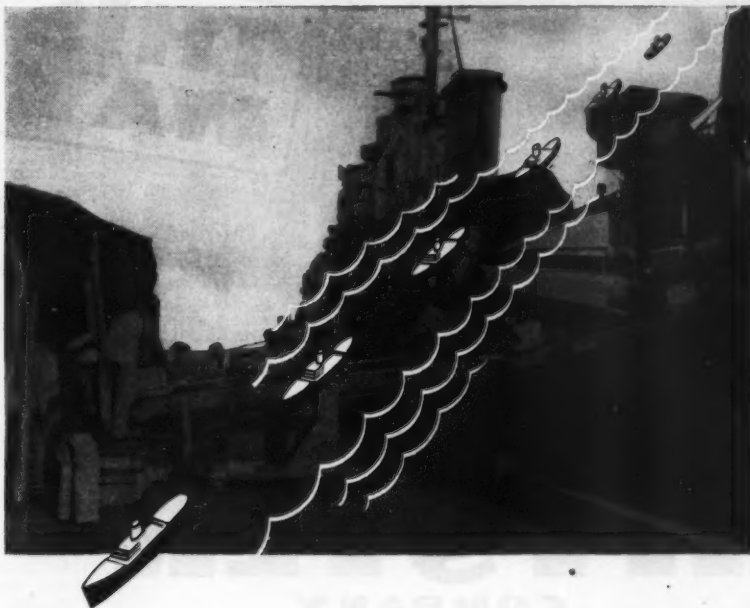
He pointed out that there is increasing public recognition that it will be sound national policy to tap foreign iron ore deposits in Sweden, Cuba, Brazil, and Chile, partly as an industrial necessity and partly as a national defense policy. The same situation applies to the importation of petroleum products, to conserve dwindling domestic supplies, and to such basic materials as timber and copper. Though it would be unsound to attempt to bring in these raw materials by water through the present 14-ft. St. Lawrence channel, it would be economical to bring such materials to the Midwest in 10,000-ton cargo lots through a 30-ft. channel.

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1534, saw the need for a direct water route from the sea to the vast inland empire. At their suggestion, the French government, with primitive tools, 300 years ago built the first system of "canals" around Lachine and International Rapids. They were only two ft. deep, and were designed to carry the boats of the adventurous French voyagers around the rapids barrier.

For nearly the last 100 years, the Middle West has had a direct access by water to the sea through the St. Lawrence, with canals and docks of limited dimensions. The smallest locks are those in the International and Lachine Rapids sections, which accommodate ships less than 260 ft. long, 44 ft. beam, and 14-ft. draft, limiting the size of vessels which enter the lakes from the sea to approximately 1,500 tons.

Everywhere else in the lakes, their connecting rivers and in the St. Lawrence River, ocean-going vessels drawing 25 ft. can navigate. The obstacle presented by the Falls of the St. Mary's River between Lakes Superior and Huron has been overcome by the construction of the Soo Canal, and the obstacle of Niagara Falls has been circumvented by the construction of the new Welland Canal. These two waterways will accommodate vessels of up to 30 ft. draft and up to 800 ft. in length.

The principal obstacles to full use of the St. Lawrence route are three

series of canals in the St. Lawrence River above Ogdensburg, N. Y., identified as the International Rapids Section; the Beauharnois Rapids Section; and the Lachine Rapids, just west of Montreal. The latter two require only limited treatment, the principal improvement works being required in the International Rapids Section. With the removal of these obstacles and with a small amount of additional dredging in the St. Clair and Detroit Rivers, the entire Great Lakes-St. Lawrence route, extending approximately 2700 miles from Duluth to the Gulf of St. Lawrence, could be made available to deep draft shipping. In all, only 258 miles of incomplete work is required to make the whole waterway navigable.

The International Rapids Section of the St. Lawrence, between Ontario and New York, is a relatively short section, only 45 miles in length, but it calls for deepening from 14 ft. to 27 ft. to permit passage of larger vessels.

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Gulf of St. Lawrence, and that the St. Lawrence is the greatest single undeveloped source of hydro-electric energy on the North American continent. The river has a generating capacity of 2,200,000 hp.

Agreement vs. Treaty

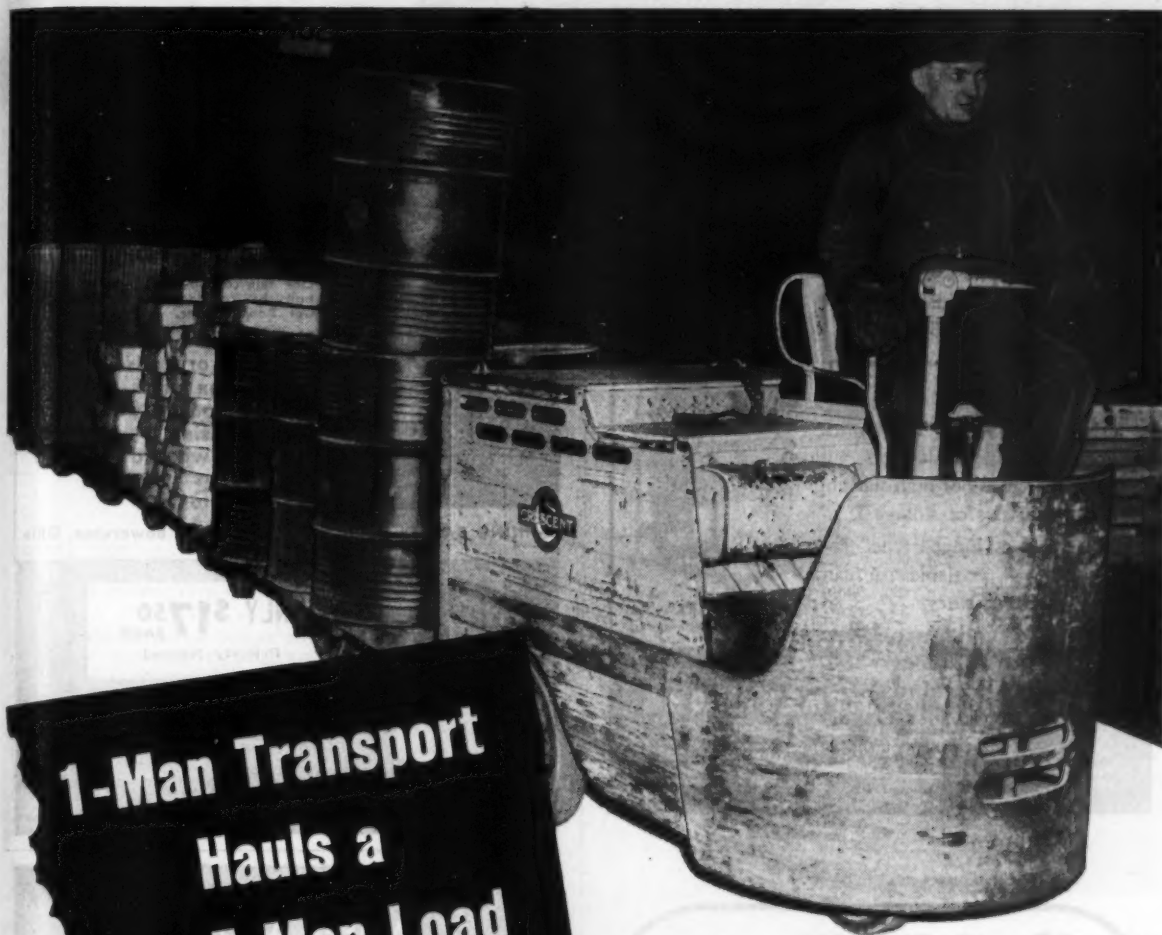
Advocates are hopeful that when the St. Lawrence proposal is voted upon in Congress, it will be considered an agreement, not a treaty, because a majority can approve agreements, while it takes a two-thirds vote of the Senate to confirm a treaty. The Attorney General of the U. S. has ruled that the proposal could be adopted by executive agreement.

There were two considerations for the project's treatment as an agreement, according to John D. Hickerson, State Department chief of British Commonwealth affairs: first, that the issues were largely domestic rather than international, and second, that as large sums of money must be appropriated, it was thought that the House should have a voice in the passing of the bill. Under terms of the agreement, majorities of both houses must pass the bill before it is enacted.

From Coolidge to Roosevelt

Calvin Coolidge, who was not known as a spendthrift, said the

(Continued on page 79)



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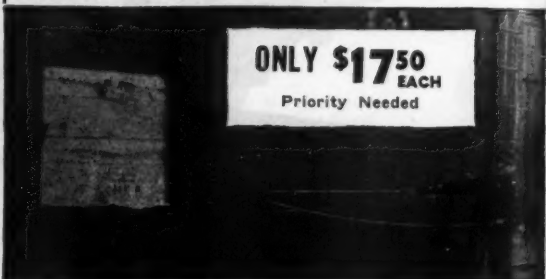
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Machines, Brushes, Inks! WPB, rail-
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Easy to use, legible, permanent. Three
sizes to meet Gov't Spec., 1", 3/4", 1/2".
For sample stencil, shippers' handbook
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MARSH STENCIL MARKING



WHEEL AROUND!

THE HANDBELT PILER

Stack and pile with this new low-cost machine. Loads, unloads, handles, elevates,
stacks cartons, cases, bags, other packages. Compact, lightweight, safe, easy to
operate, flexible. Easily wheeled into crowded corners, around the shipping
platform—fine for truck loading and unloading. Adjustable boom is clear of sup-
porting obstructions; easily extended over piles or into car or truck. Machine held
in position by floor locks on base. Reversible carrying apron. Available in four
sizes, high and adjustable up to 7 1/2, 8 1/2, 9 1/2, and 10 1/2 feet; stacks commodities
as high as 15 feet. Handles individual items up to 100 lbs. Motor mechanism in
base frame—plug into any convenient outlet. Write for Bulletin No. 11-DW-25.

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- Spiral Chutes
- Pneumatic Tube
Systems

STANDARD CONVEYORS

Don't assume you can't get equipment—Inquire.

Northeast Passage . . .

(Continued from page 76)

project is "not incompatible with economy." Herbert Hoover laid the groundwork for the project when Secretary of Commerce. Sen. George D. Aiken, Republican, of Vermont, is leading the current fight for the measure in the Senate. Henry L. Stimson, when Secretary of State in a Republican administration, negotiated the treaty with Canada which would validate the project. And Franklin D. Roosevelt, a Democrat, has repeatedly supported this project of his Republican predecessors. Other supporters include Dr. N. R. Danielian, Director of Programs and Reports, Staff of the Foreign Economic Administration, Washington, and Jesse H. Jones, former Secretary of Commerce.

Safety Plus . . .

(Continued from page 42)

Of all the activities that might have embarked on such a program, the Bureau of Ordnance faced the greatest difficulties at the outset. Equipment had to be developed to handle ammunition. Field personnel had to be trained in the operation of the new system. Contractors had to be indoctrinated in the safest methods of loading freight cars with unit loads.

Handling Laboratory

It became apparent very early in the program that a laboratory was necessary to work out and test specifications not only for unit loads and carloads but for slings, improved pallets, bridgeplates, and all the other accessories that would be needed. Consequently, while the Bureau's equipment section was perfecting an explosion proof fork truck to meet all its rigid safety requirements, the Naval Ordnance Materials Handling Laboratory was established at the Hingham Naval Ammunition Depot, to train personnel from all important shore activities and to prepare the blueprints for the program.

Today, the plans have become a reality and history is being made by the loading of astronomical quantities of ammunition aboard warships in a matter of hours. The moral of the story is one that industry will rapidly take to heart. If Naval Ordnance, with its tremendous problems, can put into operation so successful a materials handling system, can industry fail as they follow the now beaten path?

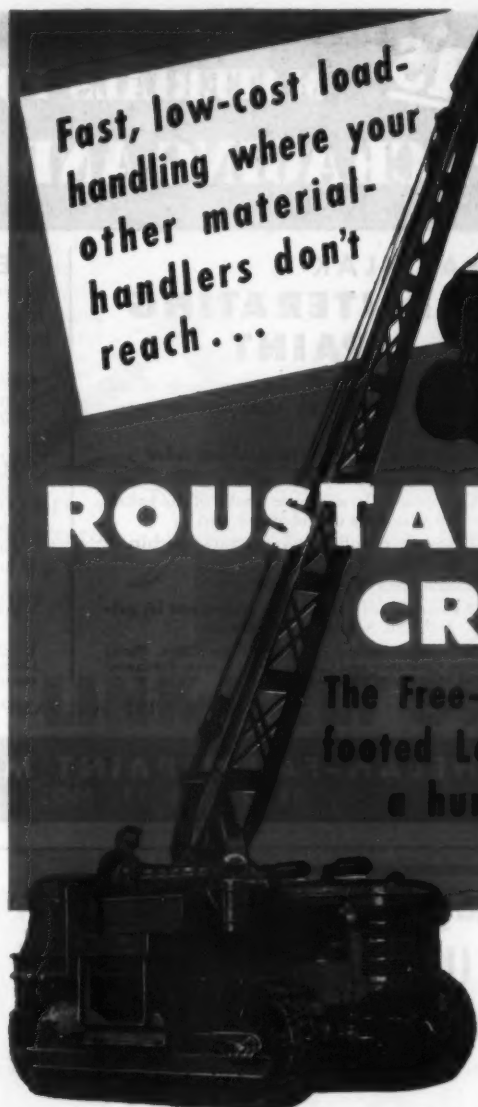
Glass Company Purchase

Pittsburgh Plate Glass Co. has purchased Anthony Wayne Glass Co., Fort Wayne, Ind., with Clarence J. Martin continuing as general manager. (Kline)

Fast, low-cost load-handling where your other material-handlers don't reach . . .

ROUSTABOUT CRANE

The Free-roving, Tractor-footed Load-hustler of a hundred uses



Roustabout saves you time and money on these and many other jobs

Big stuff off and on trucks, freight cars

Moving large machines

Handling bales, boxes, drums

Moving big castings, motors, railroad and marine gear

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If it pays you to have overhead cranes, conveyors or factory trucks, you'll find your versatile Roustabout Crane highly profitable outside their range — for moving, loading, stacking heavy stuff all around your plant. Instant action where needed — no crews taken from other work. Smooth easy operation — picks up a 7½ ton machine or sets down a crate of eggs safely. Built for years of overwork — ball-bearing boom turntable, gears in oil. Hundreds of plants regard their Roustabouts as indispensable. Write for the facts about this fast-action wheel or crawler crane.

THE HUGHES-KEENAN COMPANY
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Roustabout Cranes

By Hughes-Keenan

Load-Handling Specialists Since 1904

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Cements labels, attaching them firmly and permanently. Protects markings with a transparent, weatherproof, water and oil repellent protective coating.

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WRITE OR WIRE FOR SAMPLES TODAY

PHELAN-FAUST PAINT MFG. CO.
ST. LOUIS 11, MO.

Advantages of Palletized Unit Loads

(Continued from page 38)

pointing out the time and labor saving advantages as well as the protection

Panorama of the Navy's Sixth War Loan Exhibit at Chicago.



tion afforded the supplies through shipments consolidated into strapped, block units.

Motion Pictures

A continuous motion picture on handling of unit loads by modern mechanical equipment was shown at the exhibit during the evenings. Blown up photographs of materials handling equipment and of the steps in a unit load shipment from the manufacturer's plant to a Navy advance base were also exhibited. Pallet trucks, fork trucks, tractors, trailers, strapping equipment and unit loads bound with both steel strap and wire, were displayed.

The demonstration gave conclusive evidence that strapped unit loads protect supplies against damage. None of the 4,320 No. 10 cans suffered more than a minor dent after two solid weeks of handling by female operators who were regularly employed at Naval Supply Depots. All pallets finished the demonstration in suitable condition for reuse.

Time Studies

A series of time studies determined that one fork truck operator could remove 15 pallet loads from the trailer train and stack them in eight minutes. The 48-case loads were transferred and stacked at a rate of three cases every two seconds, a speed unapproachable by hand handling methods, even with a large gang.

(Continued on page 82)

EQUIPMENT, SERVICES AND SUPPLIES FOR SHIPPERS, CARRIERS AND WAREHOUSEMEN

LINK-BELT SPEEDER CARGOCRANE

Works Freely IN TIGHT CORNERS!

Mobility, Maneuverability, Power and Speed—Four words that mean all they say when applied to the Link-Belt Speeder Cargocrane! You run it into a narrow space, snatch up a load and you're on your way, but quick! Loading, stacking, handling materials, even assembly and erecting jobs are done fast and smoothly with the Cargocrane.

Get the full particulars. . . Ask for Bulletin 2071.



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POWERFUL
LIFT
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Builders of the Most Complete Line of
SHOVELS-CRANES-DRAWLINES
LINK-BELT SPEEDER CORPORATION, 301 W. PERSHING ROAD, CHICAGO 9, ILL.
A DIVISION OF LINK-BELT COMPANY

MODEL YC5—7½ TON CAPACITY

Not Merely Built—but
ENGINEERED
for **UTMOST SAFETY!**

Thousands of ACLC Safety Hoist Hooks are "going into service"—carrying heavier loads with utmost safety—at least cost in time and equipment. The basic reason? ACLC Safety Hoist Hooks are not merely built—but **ENGINEERED**—geared to today's crying need for more efficiency. Note these features!

- * Patented construction provides true alignment of load and hoist;
- * Eliminates lead slippage and hook straightening;
- * Load is evenly distributed between safety shoulders and lip, giving extra load carrying capacity;
- * Even shearing of pin would fail to dislodge load; safety shoulders and lip lock would still hold!
- * Scientifically designed to prevent snagging — on latches, corners, etc., a common fault in ordinary hooks;
- * Both size of ACLC Safety Hook replaces 4 sizes of ordinary hooks. Net result — **SAVINGS** in EQUIPMENT INVENTORY.
- * The ACLC Safety Hook is a forged unit designed to take maximum load with minimum metal and averages approximately 1 lb. of metal actual weight per ton load lift as against standard open hooks of approximately 4 to 5 lbs. of metal per ton load lift.
- * Duplicate all these exclusive advantages, the ACLC Hoist Hook costs far less than ordinary hooks.

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THOMAS TRUCK of Keokuk



Safety One Man

BARREL TRUCK

- * Trucker never touches barrel
- * Automatic loading and unloading
- * Sliding two-in-one chime hook
- * Safe — no backstrain
- * Balanced — truck carries load
- * Easy rolling — Hyatt bearings
- * Lifetime use — welded steel

A Clech for One Man

Safer, faster, easier way for one to handle barrels, drums, kegs up to 1000 lbs. Chime hook engages rim and cast steel prongs slide under drum instant trucker pulls truck back. That's all there is to it! Rubber tired wheels.

Write for New Catalog No. 43

THOMAS TRUCK & CASTER CO.

2200 MISSISSIPPI RIVER, KEOKUK, IOWA

D and W, April, 1945—81

for **SPEED** IN YOUR SHIPPING DEPARTMENT

Use SAFETEX TAPE because of the exclusive herringbone grooved gumming which distributes moisture evenly making the glue both "tacky" for fast sticking yet flowable for permanent sealing. No excessive rubbing necessary.

Also because the glue surface is "cracked" thereby eliminating curl and making tape pliable—clothlike. It can be handled with greater speed and efficiency over edges, around corners, and on uneven surfaces.

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Write for name of nearest paper merchant distributor.

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**PULL-TAB
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SAVES TIME AND TAPE

SAFETEX GUMMED TAPE

SAFETEX
gumming
sticks
faster,
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CUT COST • INCREASE SPEED!

FILCO EASY-RIDE CONVEYORS

This modern gravity conveyor carries cases or cartons to any department speedily and efficiently! Sturdily constructed reversible curves, straight sections. Permanent or portable; with or without adjustable supports. Our engineers can solve your problems—write us your requirements and ask for illustrated folders.

Immediate Delivery of Standard Units

The FILTER PAPER Co.
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DISTRIBUTION

THE meaning of distribution is two-fold. It is all-inclusive in character and it has a two-fold aspect. The distinction is valid and important, as Henry G. Elwell, well known traffic consultant, makes clear in his comprehensive article on "Cost Factors in Distribution" published on page 44 of this issue.

The demonstration produced favorable reaction not only among all Navy personnel which visited the exhibit, but also from the users and prospective users of materials handling equipment who showed an intense interest in modern materials handling methods. Numerous requests were made of the Navy personnel on duty for further information about the capabilities and limitations of fork trucks and tractors and about the Navy's Materials Handling Program.

The general reaction of the public, as evidenced by their questions, was one of surprise and almost disbelief,

that frail young women fork truck operators could so speedily and efficiently handle huge quantities of supplies with such ease.

Boiler Treatment

Brooks Boiler Treatment Co., formerly operated chemical division, Brooks Oil Co., Cleveland, O., has been organized, with L. W. Brennan as manager, and E. J. Mack as sales manager. Company has plant at Hamilton, Ontario, Canada, and warehouses its products throughout the United States. (Kline)

Hart Company Changes

Frederick Hart & Co., Inc., New York, N. Y., subsidiary of the American Type Founders, have announced change of addresses of their Recordograph Division which manufactures film sound recorders for the armed services. Executive offices and plant of this division have been moved to the company's modern plant at Poughkeepsie, N. Y., while sales and service offices have been established at 350 Madison Ave., New York 17, N. Y. Telephone numbers will be Poughkeepsie 6906 and in New York, Vanderbilt 6-3236.

Plans and Projects

(Continued from page 41)

to give the same consistent attention to the needs of the common defense, as has been true for generations in the crowded countries of Europe. But this war is bringing home to us the fact that our protective oceans do not separate us from the rest of the world in the way they did before the era of rapid transportation. As we are brought steadily into closer proximity to the other great nations of the world, we must give increasing consideration to the defense value of such public works as our flood control and navigation improvements." (Slawson)

Recent Business Changes

Evercrete Corp., New York, N. Y., manufacturer of protective and decorative coatings for masonry surfaces, announces as of May 1st new headquarters at 424 West 42nd St., to be known as The Evercrete Building.

PCA has obtained new quarters for its New York ticket office under the Park Ave. ramp fronting on 42nd St., directly across from Grand Central Terminal and adjacent to the airlines terminal. They will be shared with Northwest and Northeast Airlines in what is being termed temporarily as the New York Airlines center. The move is in conjunction with PCA's opening of air service into New York.

Eastern Industrial Sales Co. has combined its sales, engineering, manufacturing and service departments at 134 Huguenot St., New Rochelle, N. Y. Telephone: New Rochelle 2-6440. A direct wire for metropolitan New York calls, Fordham 7-4447, is also maintained.

Executive offices of Libbey Glass Division of Owens-Illinois Glass Co., Toledo, O., have been moved from the plant to the Ohio Building, that city, in the general offices of Owens-Illinois. (Kline)

Westinghouse Electric & Mfg. Co.'s Lamp Division's field organization has established a New England district with George H. MacGillray as district manager. He will continue to supervise customer relations in New England, with headquarters in Boston. (Kline)

Despatch Oven Co., Minneapolis, Minn., has opened a sales and field engineering office at 211 North La Salle St., Chicago, Ill. (Kline)

Illinois Oil Products, Rock Island, Ill., has purchased the trade names and various properties of the former Illinois Oil Co., now being dissolved after 37 years of distributing petroleum products. J. A. Welch, Rock Island, treasurer of the old firm, is head of the new company, with A. C. Vinton, Moline, as secretary and sales manager. (Kline)

Warehousing Loans Increase

The growing use of loans against field warehousing receipts is indicated by the volume of business contracted for by American Express Field Warehousing Corp. since this new, wholly-owned subsidiary of American Express Co. opened for business last September. Ralph T. Reed, president of both companies, reported at the recent annual meeting.

The new subsidiary was formed by American Express after a preliminary study indicated the expanding need for field warehousing facilities during wartime and also in the post-war period. The Field Warehousing Corp. is now acting as custodian for goods pledged as loan collateral and stored on the borrower's own premises.

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ROSS industrial LIFT TRUCKS and STRADDLE CARRIERS

make more efficient use of THE THIRD "DIMENSION"

Efficient utilization of storage facilities has been given new meaning by the ROSS SYSTEM of Unit-Load Handling. Because Ross Lift Trucks can tier heavy, bulky "packages" up to heights of 25 feet or more, greater use of the "third dimension" — HEIGHT — is possible. Valuable floor space is conserved, congestion relieved. . . And, the world-famous ROSS Straddle Carrier in combination with the ROSS Lift Truck makes a team that's hard to beat in transporting, spotting and tiering unit-loads swiftly, economically, efficiently — indoors or out. It will pay you to investigate the ROSS SYSTEM both for now and after Victory.



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NEW ROSS
BOOK, "HIGH
SPEED HANDLING"

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DW-45

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MATERIALS-HANDLING EQUIPMENT

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Alaskan
PUMP TYPE EXTINGUISHER

**DROWNS
FIRE**



2 1/2
Gal.

Approved for Class A* fires — protects 2,500 square feet of floor space. Double acting pump — equipped with patented Safety Phlare — throws a steady stream of water up to 45 feet. Alaskan Pump Type Extinguisher operates perfectly in temperatures as low as 45° below zero when used with anti-freeze charge.

IF IT'S **GENERAL** IT'S DEPENDABLE

WHERE TO USE ALASKAN



*Underwriters' approved for Class A fires — wood, textiles, paper, rubbish, and similar materials.

Hold extinguisher firm with foot pedal. Direct nozzle with one hand and operate pump with other. Drench area.



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Faster



Handle the load ONCE! KRANE KAR picks up, transports, and positions the load, to and from the Cargo Plane or RR Car. You don't waste time maneuvering the vehicle . . . just operate the "live" boom up and down or from side to side, by power, with full load on hook. Stable without jacks or outriggers, automatic braking of boom and load. Simple and safe to operate.

USERS: Lockheed Aircraft; Carnegie-Illinois Steel; N. Y. Central & Hudson River Railroad; DuPont; Pullman Standard Car Mfg. Co.; Boeing Airplane; etc.



THE ORIGINAL SWING BOOM MOBILE CRANE
WITH FRONT-WHEEL DRIVE AND REAR-WHEEL STEER

2 1/2, 5, AND 10 TON CAPACITIES

KRANE KAR

SILENT HOIST & CRANE CO., 857 63RD ST., BROOKLYN 20, N.Y.

**ELIMINATES USE
OF POISON!**
REQUIRES NO BAIT!

A practical and economical way to rid buildings of rodent pests! Easy to prepare! Just place WIZO RAT GLUE BOARDS near rat hole. Fasten boards to floor to prevent pulling away. Rodents are caught firmly the moment they step on the boards. WIZO RAT GLUE can also be obtained separately for preparing your own boards.

**WIZO
RAT GLUE BOARDS**



Write for catalog and prices on complete line of warehouse supplies

ELKAY PRODUCTS CO.

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**MORE FORD TRUCKS
ON THE ROAD . . . on
more jobs . . . for more
good reasons!**

FORD MOTOR COMPANY



Canadian Workers Win Wage Increase

Retroactive wage increases of six cents an hour were accepted at a mass meeting by Halifax, Nova Scotia, waterfront cold storage and grain elevator workers who staged a one-day strike last week to enforce their demands for increases of from five to 15c. an hour.

The increases were retroactive to July 1, 1944, and the men will collect 24c. for every hour of overtime worked since that date, under the new scale. A 10c. an hour cost of living bonus demanded by the men has been incorporated in the basic wage rate.

The men, members of locals 224 and 231 of the Canadian Brotherhood of Railway Employees (C.C.L.) accepted the proposals presented to them by W. J. Smith of Ottawa, general representative of the union. Mr. Justice G. B. O'Connor of the National War Labor Relations Board drew up the proposals which ended the lengthy dispute between the men and their employers, the National Harbors Board.

Fred Nicol, Maritime Provinces representative of the C.B.R.E. said the increase was in line with recent adjustments among steam railway employes. (Carmichael).

Priorities Obtained For Oregon Plant

Kelley, Farquhar & Co., Front & Norway Streets, Salem, Ore., frozen food packers have been granted priorities to proceed with construction of a \$95,000 cold storage packing plant on Title Road. General Manager is Herb Kane of Salem. It is estimated the plant will cost between \$60,000 and \$65,000, and the remainder of the \$95,000 for equipment. (Haskell).

WLB Defends War Veteran Ruling

A widely-circulated report that the New England War Labor Board has ruled that the "draft law does not grant a returning veteran super-seniority, but only the same seniority he would have accumulated if he had remained on the job" has been branded as a misinterpretation of the Board's position on this subject by Saul Wallen, chairman of the Region I WLB.

"In the only case involving this issue yet to come before the Board," Mr. Wallen declared, "the company's request for such a so-called 'super-seniority' clause was denied on the ground, to quote the exact wording of the order, that 'it is the intent of the Board that applicable provisions of the Selective Service Law shall apply' . . .

"In other words," he stated, "the Board is of the opinion that interpretation of the Selective Service Law in regard to the seniority rights of returning veterans is solely within the jurisdiction of Selective Service authorities and not a function of the War Labor Board."

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patents pending

This GLOBE BARREL TRUCK can solve your handling problems

Here's a "one-man" barrel truck designed to handle barrels, tierces and drums in the most economical, quick and efficient manner possible.

Two posts for strength, perfectly balanced for easy handling, floor-saver wheels for smooth fast rolling.

Self-loading and unloading, requiring only one man—or even a girl—to operate, it handles all sizes of drums, barrels and both small and large tierces as well as flat boxes. Place the truck against the barrel, drop the chime hook and pull down on the handles. Places barrels flush, stands upright when not in use and nests in storage.

You'll like this truck—write for full details today.

THE GLOBE COMPANY

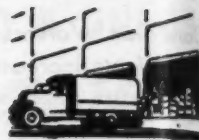
4000 PRINCETON AVENUE

CHICAGO, ILLINOIS

30 YEARS OF SERVING INDUSTRY WITH EXPERTLY DESIGNED EQUIPMENT

D and W, April, 1945—85

Cold Storage...



ICC Order Requires Eggs Packed and Stowed To Minimize Damage in Transit

AT the request of Col. J. Monroe Johnson, director, Office of Defense Transportation, the Interstate Commerce Commission has issued ICC Service Order No. 288 to rail carriers requiring that eggs be so packaged and stowed as to minimize damage in transit.

"In 1944 disregard of such precautions resulted in very heavy damage to egg shipments with resultant contamination of, and damage to, the interior of cars and consequent delays in the loading and prompt reuse of cars," Col. Johnson said. In view of the shortage of refrigerator cars the ICC is of the opinion that an emergency exists calling for immediate action before the beginning of the season of flush production of eggs. This is in accordance with the expressed

policy of the War Food Administration that eggs purchased by the Government must be packed in proper containers.

ICC Service Order No. 288, issued Feb. 27, states that rail carriers may accept shell eggs from shippers only if the eggs are packed in new or used wooden cases in sound condition, or in new fibreboard cases. The order also states that cases shall be loaded in cars in accordance with item No. 46 of ODT General Order 18A-2A, with additional directions to insure proper stowing of cases in the cars. Order No. 288 became effective March 15 and expires Dec. 31, 1945.

Expected farm egg production for 1945 is estimated by the United States Department of Agriculture at 4,350,-

000,000 doz. eggs, or 145,000,000 cases of 30 doz. eggs each; this is 9 per cent under the 1944 record production but above that of any preceding year. It is estimated that the railroads will transport not more than 15 per cent of this egg crop, or 21,750,000 cases.

The five-tier-high loading requirements of ODT Order 18-A and ICC Service Order 288 will result in an average load of about 600 cases per car, or 36,250 carloads, according to ODT estimates.

Best available estimates at this time indicate, said the ODT, that there will be available for use this year at least 8,000,000 sound used wooden cases; probably 10,000,000 new wooden cases, and at least 12,400,000 new fibre-board cases.

Cold Storage Directory Now Available

W. M. O'Keefe, executive secretary, National Assn. of Refrigerated Warehouses, states that the new Directory of Public Refrigerated Warehouses is now available and will be furnished without charge upon request to any concern engaged in the production, processing or distribution of perishable food products.

Requests should be addressed to the organization's Washington office. This booklet carries complete listings of the organizational set-up and facilities of all of the member companies, some 350 refrigerated warehousing establishments located in all parts of the country.

Cold Storage Coop. Builds in Oregon

Priorities have been granted the Stayton Canning Co. Cooperative, Stayton, Ore., for construction of a combined cold storage plant and warehouse at an estimated cost of about \$98,078, it is announced by C. T. Mudge, district WPB chief in Portland, Ore.

General Manager F. M. Smith will act as general contractor. In accordance with plans and specifications drawn for installation of all needed equipment, Western Engineering Co., Portland, will supply all equipment. Construction is already under way.

Western Locker Mfr. Plans Expansion

Plans for an assembly and service plant in Spokane, Wash., have been announced by Beall Pipe and Tank Corp., Portland, Ore., manufacturer of frozen food lockers, as soon as

government restrictions on materials permit.

The company will build a new plant in Portland and assembly plants in Spokane and Billings, Mont. The more complicated parts of the lockers, fabricated parts of the lockers built principally of aluminum will be stamped in Portland and shipped to the assembly plants. (Haskell).

Lighter Aluminum Refrigerator Cars With New Features Planned By Reynolds

An aluminum refrigerator car, 18,000 lb. lighter than present standard cars of the same exterior dimensions, will be available to shippers in the postwar era, Reynolds Metal Co., planners of the new equipment, revealed recently.

When completely iced for use, the new car will weigh approximately 48,600 lb., instead of the 66,000 lb. of present designs, John W. Burnett, head of the company's railroad supply division, stated.

High-strength, corrosion-resistant aluminum alloy will be used for the superstructure, he said, while underframe, trucks, swing action and roller bearings will be of steel. The ice bunker will be beneath the car, increasing capacity of the car by 392 cu. ft., compared with present cars, and providing a lower center of gravity.

The cars, Mr. Burnett said, have been designed to consume only 26 lb. of ice per hour, instead of the 34 to 36 consumed in current designs. Outer surfaces will be of aluminum sheets, requiring no paint, and capable of reflecting 95 per cent of radiant heat. Interiors will be paneled with insulating materials.

Equipment will include two fans driven from the car axles, one to blow cold air from the ice bunker through vertical air ducts, so that it will pass over the top of the load. The other, at an opposite end of the car, will suck the air out of the body of the car and discharge it into the ice bunker for recooling. A heater may also be installed through the bunker door at ground level for use in winter, with the same circulating system to handle the hot air. (Slawson).

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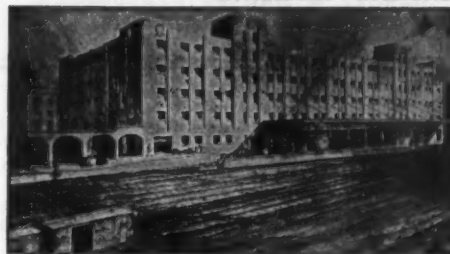
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Merchandise—Household Storage



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Compartments
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POOL CAR DISTRIBUTION

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Receiving—STORAGE—Handling.
Motor Freight Service to all points.
6-car Private Siding. Reciprocal Switching.
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Low Insurance Rate Bonded Trucking Service

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Both sides of the St. Lawrence Seaway
Project are explained in the article on
page 22.

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OPERATING WAREHOUSES
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Completely Equipped

Merchandise LOS ANGELES WAREHOUSE CO.

316 Commercial Street
Household Goods

LEGAL NEWS...

By LEO T. PARKER
Legal Editor

Furniture Damage

Considerable discussion has arisen from time to time over the legal question: when furniture is damaged while in transit or storage what amount may the owner recover from the warehouseman?

For illustration, in *Union Storage & Transfer Co. v. Lamphere*, 40 Atl. (2d) 258, D. C., it was shown that a person purchased an antique marble top table and had it shipped from Mexico to Washington, D. C. He employed a local storage company to transport it from the Custom House to his apartment. At the entrance to the apartment the upright position of the table was reversed to facilitate its passage through the doorway; the top was dislodged and

dropped to the tiled floor of the hall, breaking into about 15 pieces.

The owner sued the storage company to recover a large sum in damages. During the trial the wife of the owner testified as to amount paid to have the top replaced together and offered to introduce the bill as evidence. Although the owner failed to prove that the amount paid to repair the top was "reasonable" the lower court rendered a verdict in favor of the owner of the table. However, the higher court reversed the verdict, saying:

"In the absence of evidence that the repairs were proper, or worth the sum paid, it was error to hold that the sum paid could be recovered. The reasonable cost of such repairs is the proper measure of the recoverable damage."

License Enforcement

If a city enacts an ordinance undesirable to warehousemen, or others, a suit should be filed to have the ordinance declared invalid. However, a suit based upon a "threat" by officials to enforce either a void or valid ordinance will not be entertained by a court.

For example, in *City of Gary v. Gary Warehouse Co., Inc.*, 57 N. E. (2d) 767, Ind., a city ordinance was passed that required payment of annual license fees for commercial motor vehicles using the city streets. A warehouse company, which operates motor trucks, filed suit and asked the court to grant an injunction against the city officials "threatening" to enforce the ordinance. The higher court refused to issue the injunction, and said that the warehouseman failed to prove that such threat effected any injury to his business.

Taxable Imports

While merchandise, or chattels, in moving in interstate commerce, it is exempt from state taxation. Such taxation is rendered exempt by the Federal Constitution and statutes. Merchandise imported from a foreign nation, also, generally, is exempt from taxation pursuant to the Constitution of the United States.

For example, in *Washington Chocolate Co. v. King County*, 152 Pac. (2d) 981, Wash., it was shown that cocoa

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METROPOLITAN WAREHOUSE COMPANY

Established 1924

Incorporated

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General Manager

1340-56 E. Sixth St.
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FACILITIES—270,000 sq. ft.; Fireproof, reinforced concrete const.; Sprinkler sys.; A. D. T. alarm service. Ins. rate, 11.7. Siding on A. T. & S. F. Ry.; capacity, 18 cars; free switching. Ample Motor Truck Platforms—Sheltered.

SERVICE FEATURES—Pool car distributors. Motor transport service available. Space for lease: Storage; Offices; Cooler Rooms.

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MERCHANDISE STORAGE AND DISTRIBUTION
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Storage Distribution Drayage
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240,000 Square Feet 117 Piece Motor Equipment
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Free Storage—Custom Bonded—Internal Revenue Bonded
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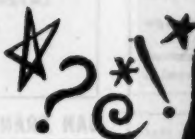
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use the best warehouse
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I like personal consideration for my merchandise and my shipping problems. Yeah, I want insured, fireproof warehousing space . . . and, custom-bonded storage, too. What's more, I want financial responsibility. Now, I've found I can get all this PLUS better service, more accessible location . . . AND, better pool car distribution when I call on North Denver Transfer and Storage Co.

Forty-three years in business—growing in experience and courtesy every minute—they give me what I want and what I need.

Take it from me, Buddie. In Denver you better get North Denver Transfer and Storage Co. to handle your stuff in 1945. They've got plenty on the ball and you'll get a little peace o' mind when you warehouse, office or distribute through them.

Signed, sealed and delivered . . .
A. Smart Shipper

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Transfer & Storage Co.

Office: 2016 Blake St. DENVER, COLORADO

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17-CAR SIDINGS • FREE SWITCHING • UNLIMITED FLOOR LOADS

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U. S. Bonded Warehouses Post Car Distribution Household and Merchandise Facilities Private Siding Our fleet covers Connecticut and Massachusetts daily. Warehouse at Hartford, Conn., and Springfield, Mass.

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TRANSFER & STORAGE CO.

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beans were imported from a foreign nation by a corporation engaged in manufacturing chocolate and cocoa for sale at wholesale. The beans were stored by the manufacturer in a warehouse in the original sacks to await manufacturing process. The question presented the court was whether the state, county or city authorities could collect taxes on such beans. In holding in the negative the higher court said:

"We find no reason or authority for distinguishing between imports intended for sale and those intended for use by the importer in some manufacturing process."

On the other hand, see *Warring v. City of Mobile*, 75 U. S. 110, where the Supreme Court of the United States held that if an importer of merchandise sells the same, it becomes part of the general property of the state, even though it remains in the original package, and the purchaser of owner must pay state taxes on the merchandise.

The distinction between merchandise which has lost its status as an import and merchandise which has not lost that status is illustrated by two leading decisions. In the case of *Booth Corp. v. Case*, 182 Wash. 392, the court said that imported merchandise is not taxable by a state in which it is stored by the importer and kept separated from common merchandise of the state. In the later case of *State*, 198 Wash. 413, the court held that one engaged in the business of importing merchandise is liable for

the state occupation tax, because merchandise was processed within the state and thereby lost its status as import.

There are, then, three situations in which imported merchandise may be taxed by the state: (1) When the merchandise is no longer in the original package; (2) when the importer has so acted upon the property that it has lost its character as an import and has become a part of the general mass of property in the state; and (3) when the merchandise has been sold by the original importer to a purchaser, even though the merchandise in the hands of the purchaser remains in the original package.

Not Within Bankruptcy

Many persons erroneously believe that a discharge in bankruptcy eliminates or renders all debts void. However, this is not true.

For example, in *Saueressig v. Armour*, 16 N. W. (2d) 417, Wis., the court stated that a driver of a motor vehicle was "in a drunken condition and in a reckless, wilful and wanton disregard of the safety of others," when he seriously injured a pedestrian.

The injured pedestrian sued the driver for damages and was granted a judgment of several thousand dollars. The driver took benefit of bankruptcy, believing he could avoid this money judgment.

The higher court refused to agree with this contention, saying:

"It could hardly be contended that a judgment for death by wrongful act against Montgomery (employee) would be discharged by a discharge in bankruptcy."

Sues for Commission

When any one employs a real estate broker to sell or lease premises, he must pay the agreed commission if the broker "brings together" the prospect and the seller or leasee.

For example, in *Allen*, 16 N. W. (2d) 691, Mich., it was shown that a warehouseman made a lease contract with a warehouse building owner to lease the warehouse for five years at \$1,450 per month. Later the warehouseman made an agreement with a real estate broker to pay a commission to obtain a subtenant. The contract provided that, if "deal is consummated, we will assure you" a commission. The broker continued negotiations until the warehouse building owner decided not to permit the warehouseman to sublet the building. He had this right in view of a clause in the original lease contract.

Several months later the warehouse building owner released the warehouseman from his lease contract and leased the building directly to a company. The broker had shown the officials of this company the warehouse building and sued the warehouseman for the agreed commissions. The higher court held the warehouseman liable.

Cannot Use Own Name

Modern higher courts consistently hold that no person may use his own name in a manner likely to deceive the public or illegally take customers from a competitor.

For example, in *Cain's House, Inc., v. Cain*, 45 N. E. (2d) 397, Mass., it was shown that a man named Cain has developed a large business under his own name. Another person named Cain decided to go into the same business. He placed a large sign in front of his place of business which contained his own name "Cain" in a large print.

The original Cain sued the latter and asked the court to grant an injunction against the latter Cain using his own name in his new business. The court granted the injunction and held that the latter Cain could not use his own name in a manner that it is likely to confuse the ordinary public.

Subcontractor Liable

Generally speaking, an employee who is injured while working for a subcontractor must recover compensation from his employer.

For illustration, in *State Compensation Insurance Fund v. Industrial*, 152 Pac. (2d) 505, Cal., it was shown that a property owner had a general contract to erect a warehouse. There were several subcontractors. An employee of a subcontractor was injured. He sued to recover compensation.

Both the general contractor and the subcontractor carried insurance under the State Workmen's Compensation Act.

The higher court held the employee entitled to recover compensation from the subcontractors.

Insurance Company Liable

Generally speaking the employer under whose control the testimony shows an employee was working, when injured is liable for payment of compensation.

In *Girard v. Commercial*, 152 Pac. (2d) 509, Cal., it was shown that a trucking company carried an automobile liability insurance policy against injured third persons.

The higher court held that if an injured person obtains a final judgment against the trucking company, the injured person cannot later sue the insurance company.

Obviously, under these circumstances, where a court renders a judgment against a warehouseman, the insurance company must reimburse him for the amount of damages paid to the injured person.

Statute of Limitations

All states have enacted laws which void debts after a specified number of years. Generally speaking, these laws do not apply to delinquent taxes.

For instance, in *California Employment Commission v. MacGregor*,

149 Pac. (2d) Cal., the state sued a corporation for payment of unemployment contributions in the sum of \$532.41, due as required by law from Nov. 1, 1937, to Oct. 12, 1938.

The statute of limitation provided that debts of this age are "outlawed." However, the court held the corporation liable for the taxes, and said:

"Clearly the contributions in question constitute an obligation in the nature of excise taxes. The Supreme Court has definitely decided that contributions paid by an employer under the Unemployment Insurance Act constitute excise taxes."

Collides With Truck

Under certain circumstances the railway company may be held liable in damages for injuries or death of operators of motor vehicles.

In *Krause v. Baltimore & O. R. Co.*, 30 Atl. (2d) 795, Md., a motor truck owner sued a railroad company for damages and testified that he collided with a train at about dark and that when he approached the crossing he did not see or hear the oncoming diesel engine because no whistle was sounded and the engine had no lights on. A motorist who drove closely behind testified that he was listening for trains, but that he did not hear the engine's horn or whistle sounded.

In view of this testimony the higher court held the railroad company liable for \$8,500 damages.

On the other hand, see *Kansas City Southern Ry. Co., v. Mickel*, 183 S. W.

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9 Center St., Hartford 5, Conn.

15,000 sq. ft. of Storage Space—Consolidate shipments via N.Y., N.H. & N.R.R.

Members: Independent Movers and Warehousemen's Assn., Conn. Motor Truck Assn., Hartford Better Business Bureau.



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SILENCE Warehouse Co., Inc.

HOUSEHOLD GOODS EXCLUSIVELY

Fireproof Warehouses

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Members: AWA, NFWA, CWA, New Haven Chamber of Commerce, Hauling Agent Allied Van Lines, Inc.



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DAVIS STORAGE COMPANY

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Modern Fireproof Merchandise Warehouse Private seven-car Siding, adjacent to Steamship and R. R. Terminals. Pool and stop over cars distributed. Merchandise Storage.

Motor Truck Service to all towns in Connecticut. Low Insurance Rate. Prompt, Efficient Service.

Member of Connecticut Warehousemen's Assn.

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Established 1860



The E. J. Kelley Co. Storage Warehouses

Main Office, Torrington, Conn.—Telephone 9243 One of New England's Largest Transportation Companies

Household Goods Packed, Stored, Shipped. Merchandise Storage and Distribution.

Pool Cars Distributed in All Parts of Connecticut. Branch Offices in Bridgeport, Hartford, New Haven & Waterbury, Conn.; Springfield & Worcester, Mass.

NEW HAVEN, CONN.

PAUL A. DAHLGARD, Owner



West Haven Trucking Company Storage Warehouses

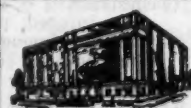
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Moving and Storage of Household Goods Exclusively

Member Connecticut Warehousemen's Association

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(See Page Advertisement Directory Issue)

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Member—NFWA, AVL, C.W.A.

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THE JACOBS TRANSFER COMPANY, INC.

Est. 1857

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Washington 2, D. C.

Phone: District 2412

SERVICES in Washington and its Commercial Zone:

1. POOL CAR DISTRIBUTION

On B. and O. R.R. Siding

Fast—Economical—Dependable

2. LOCAL CARTAGE

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Maurice Kreslin, Mgr.

Manhattan Storage & Transfer Co.

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Household Goods storage, packing, shipping. Pool Car Distribution Merchandise.

Lift vans local delivery.

Member: Ind. Movers & Warehousemen's Assoc.

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Members: NFWA, AVL Canadian, British, French & Other Areas.
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There's always

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Pool Car Distribution

Direct Switching Connections Into Warehouse
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TERMINAL REFRIGERATING & WAREHOUSING CORPORATION

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WASHINGTON, D. C.

W. E. EDGAR, Mgr.

THE TERMINAL STORAGE COMPANY OF WASHINGTON

First, K and L Streets, N. E., Washington 2

Large buildings of modern construction, total floor area 204,000 square feet, of which 109,000 square feet is of fireproof construction.

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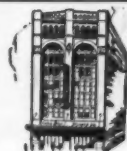
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Heated rooms for protection against freezing.

Member of American Warehousemen's Association

WASHINGTON, D. C.

Established 1901



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We Reciprocate Shipments

(See advertisement in Directory Issue, page 141)

Member of N.F.W.A.—W.W.A.

JACKSONVILLE, FLA.

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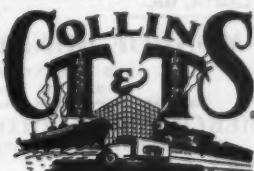
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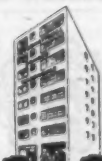
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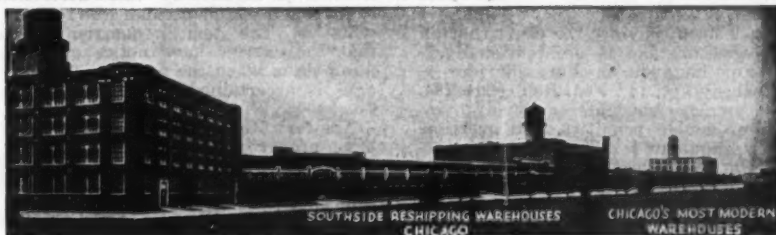
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(2) 45, Ark., where the testimony proved that a passenger train collided with a motor truck at a grade crossing. The engineer testified that the truck came upon the tracks without any warning. The higher court held the railroad company not liable.

Comma Important

Frequently, a mere comma in a state law, city ordinance, or contract is sufficient to cause a higher court to render a verdict favorable to the party in suit.

For illustration, in *State ex rel. Chatlos v. Rowland*, 38 Atl. (2) 785, Conn., the higher court held that a "comma" in a city ordinance changed its meaning.

Aviation Today

Aviation today is an established method of transportation. Municipalities which desire to construct modern airports usually will not be restricted by the higher courts.

For example, in *Warren v. City of Detroit*, 14 N. W. (2d) 134, Mich., a city selected a location for a municipal airport, and certain citizens filed suit and asked the court to grant an injunction to prevent the city from acquiring the selected land. These citizens said that the airport would be a legal nuisance at this location.

The higher court refused to grant the injunction saying that an airport is not a nuisance per se.

On the other hand, in *Burnham*

v. Beverly Airways, Inc., 1942, 311 Mass. 628, the higher court held that flying over private houses at an altitude of less than 500 feet is certain to produce undesirable noise to which home owners have a right to object.

Cargo Insurance

Recently, a higher court held that an insurance company, which insures merchandise transported by common carriers, remains liable although such carrier has no license to operate its business and the Public Service Commission issues to it an invalid certificate.

For example, in *McIntosh Co. v. Whieldon*, 30 S. E. (2d) 851, S. C., it was shown that the Public Service Commission of South Carolina issued a certificate to a motor truck owner to transport chattels and merchandise within and outside the state. An insurance company issued to the carrier a "cargo insurance policy." This policy covered loss or damage to merchandise transported by the carrier.

A company delivered to the carrier a load of chattels to be transported from South Carolina, to Baltimore, Md. While enroute the vehicle was wrecked and overturned in Virginia, resulting in the shipment being damaged to the extent of \$412.23.

A suit was commenced by the shipper against both the carrier and the insurance company to recover the sum of \$412.23, the value of the merchandise.

The carrier and the insurance company attempted to avoid liability on the grounds that the Public Service Commission of South Carolina had exceeded its authority when it authorized the carrier to transport merchandise outside the State of South Carolina, and further that the carrier had neglected to renew its license to operate in South Carolina.

Notwithstanding these facts the higher court held both carrier and its insurance company fully liable for the loss.

Labor Standards Act

An employee whose duty is the management of other employees is exempt from the scope of the Fair Labor Standards Act.

In *Allen v. Atlantic*, 145 Fed. (2d) 761, an employee, whose primary duties were 80 per cent management of other employees and 20 per cent performing the manual tasks as night engineer, sued his employer to recover back wages, penalties, lawyer's fees, etc. under the Fair Labor Standards Act.

The higher court refused to hold in favor of the employee because he acted as a manager of the plant.

Also, the law is now well settled that dealers who sell goods or merchandise, the greater part of which is in intrastate commerce, do not come within the purview of the Fair Labor Standards Act.

For example, in *Harris v. Hammond*, 145 Fed. Rep. (2d) 333, it was

shown that a suit was filed by three former employes of a man named Hammond to recover unpaid minimum wages, overtime compensation, liquidated damages, attorneys' fees and costs under the Fair Labor Standards Act.

During the trial testimony was given that Hammond had a limited number of customers in adjoining states to whom he delivered merchandise in his motor truck. However, a very large majority of his customers entered his store and bought merchandise over the counter.

The higher court refused to hold Hammond within scope of the Fair Labor Standards Act because the testimony proved that less than 20 per cent of his business was to customers outside the state.

the years the employe had worked the former had attached to checks given the employe earnings statement which set forth the hours he had worked each day, the amount of money he was to receive for that day, and the total amount he had earned.

On the back of the check preceding the employe's endorsement was this

statement: "The endorsement of this check by the payee guarantees acceptance of it in full settlement of the account as stated in the earnings statement bearing corresponding check number."

In view of this testimony the higher court refused to hold the company liable for double penalties.

LEGAL

Questions and Answers

... The Legal Editor will answer legal questions on all subjects covered by D and W. Send him your problems, care of this magazine. There will be no charge to subscribers for this service. Publication of inquiries and Mr. Parker's replies give worthwhile information to industry generally

Double Wages

Section 16b of the Fair Labor Standards Act authorizes employes to recover double penalties from an employer who intentionally violates the act. A recently decided case clearly illustrates what employers must do to convince the court that an alleged mistake is unintentionally.

For instance, in *Bergschneider v. Peabody Co.*, 142 Fed. Rep. (2d) 784, an employe sued his employer to recover double penalties, and overtime pay, liquidated damages, and attorney's fees alleged to be due under the Fair Labor Standards Act.

The employer proved that during

O.S. and D. Report

Question: Recently we have had a reason to know whether or not notice of claim on O.S. and D. Report form is valid if signed by the carrier's agent and a warehouseman who represents us. The item in question was that the carrier have notice of our filing claim when the amount of damages is ascertained. *River Stores & Co.*

Answer: Generally speaking, you have proper and legal right to authorize a warehouseman to act as your legal agent in matters of this kind. Therefore, the important con-

sideration is whether you actually authorized the warehouseman to represent you by making the signature? The fact that the carrier's agent also signed the document is in your favor. However, in the future I advise that you resort to formal and legal notification of the carrier with respect to similar complaints.

In all controversies of this nature the courts first refer to all applicable law by which the necessary notifications must be filed. In all cases the courts have refused to hold in favor of the complaining party if the testimony proves that such laws and also

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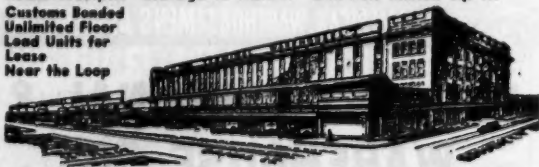
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valid regulations were not complied with. Frequently the court must look toward the conduct of both litigants and determine whether each had fair opportunity to present arguments.

On the other hand, it seems that in a majority of instances the courts have held that if the carrier's agent signs an O.S. and D. report, this is indication of over or under quantity, as well as condition. Of course, if the shipper or consignee fails to make formal claim within the legal period, it may result in an adverse verdict.

Soldiers' Relief Act

Question: Can you refer us to the latest decisions concerning the application of the Soldiers' and Sailors' Relief Act? Also what is the law where the customer's whereabouts are unknown and, consequently, no information is available as to military service? Your courtesy will be appreciated. **Keystone Transfer Co., Inc.**

Answer: The law is established that in any suit against a person in military service the court may, in its discretion, order such person to pay the judgment. In other words, whether or not a warehouseman may sue a person in military service is left entirely to the discretion of the court.

For illustration, in *Willson v. Willson*, 14, O., Supp. 92, it was shown that a person in military service had valuable real property. Suit was filed to compel him to pay certain bills. The man asked the court to stay or

delay the suit. However, the higher court refused to do so saying:

"It is not reasonable to believe that Congress intended that an individual in military service could escape any or all civil responsibilities by hiding back of this Civil-Military cloak of protection."

On the other hand, it must be remembered that a majority of higher courts have stated in effect that certainly those in military service have plenty of duties and responsibilities, requiring their fullest attention, without the worry and concern of domestic and civil problem at home. For other higher court cases see *Tulley v. Superior Court*, 45 Cal. App. (2d) 24; *Silhuly v. Hawkins*, 108 Wash. 79; *State v. Klene*, 201 Mo. App. 408; *Brooklyn Trust Co. v. Papa*, Sup., 33 N.Y.S. (2d) 57.

Regarding investigations, it is possible for you to write to the United States War Department, at Washington, D. C., and obtain information whether a particular person is in military service. Of course, it matters not that you do not have information that the owner of stored goods is in military service. Your liability is exactly the same whether or not you have this information.

Interstate Business

Question: When may a warehouseman avoid payment of state taxes on merchandise shipped from a foreign state for storage and distribution? **A. S. L. Co.**

Answer: A state cannot tax interstate business. Therefore, the im-

portant question is what is interstate business?

In the case of *Oklahoma Commission, Okla.*, 116 Pac (2nd) 899, a corporation had its office in Wisconsin. This corporation shipped merchandise on consignment from Wisconsin to a warehouseman in Oklahoma. The corporation retained legal title to the merchandise shipped to the warehouseman until the latter sold it.

The higher court held that the transactions were intrastate. This decision resulted in the corporation and not the warehouseman "doing business" in Oklahoma. The corporation was held liable for payment of taxes in Oklahoma.

Also, see following cases: In *Armour*, 149 Ala. 205, where a corporation sold and delivered goods from its warehouse in a foreign state. The corporation did intrastate business in this foreign state and was subject to taxation.

In *American*, 192 U. S. 500, the Supreme Court of the United States held that transactions are nontaxable where a seller ships goods to a distributor or warehouseman in another state for distribution. In this case the warehouseman or distributor sorted and delivered the goods in the original packages to customers of the seller.

Also, the law is established that when a purchaser contracts positively for a definite quantity of merchandise, the seller, located in a foreign state may ship it in installments, or the complete order to a warehouseman in

the purchaser's state. If the seller instructs the warehouseman regarding the contract dates for distribution or delivery to the purchaser, the state in which the warehouse is located cannot collect taxes, because such transactions relate to interstate transactions.

Broken Water Main

Question: Recently a water main broke and flooded the basement of our warehouse. Please advise whether or not we may recover damages from the city. **Wilson Warehouse Co.**

Answer: A municipality is liable for damages caused by a break in a water pipe line, if the evidence clearly proves that negligence of properly authorized city or water department employees resulted in the damage.

See the leading higher court case of Boston, 174 N. E. 686. In this case the testimony showed that a water main broke. However, the court refused to hold that this testimony was sufficient to justify a conclusion of negligence on the part of the city officials.

In another higher court case, Smith v. Boston Co., 129 Mass. 318, there was convincing evidence that water pipes were not laid with reasonable and ordinary care. In view of this testimony the higher court held the city liable for damage caused by a break in the water pipe line.

You cannot recover damages from a city for break in a water main unless you prove that the damage re-

sulted from negligence of the city officials or authorized employees.

Question: As a selling corporation we have depleted our regular stock sales to purchasers who hold high priority. What rights has a purchaser of low priority to whom we made a contract for the same merchandise? **S. T. P. Co.**

Answer: In *James Co. v. Republic Corp.* 31 N. Y. S. (2d) 857, the seller specified dates for delivery of materials purchased under a valid written contract. However, the seller did not fill the orders because the purchaser had no high priority rating.

The higher court held that this

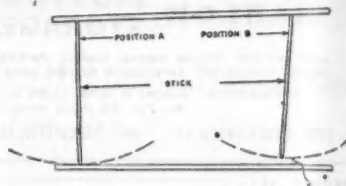
seller was not relieved from damages for breach of the written contract although all of the merchandise controlled by him had been necessarily allocated to sellers who had high priority ratings. In fact this court held that in order that no seller may avoid liability on a contract, for failure to fulfill its terms, he must prove that he honestly endeavored to purchase the merchandise from various sources in order to make deliveries to purchasers having low priority. In other words, if a seller contracts to sell merchandise he must comply with the terms of the contract irrespective of prior defense orders.

How to Align Objects

AN excellent practical kink for determining whether or not objects are parallel is illustrated in the sketch herewith.

A wooden stick, used as indicated, is far better for this purpose than is a tape line or cord. Use a stick of precise length—just long enough to touch both objects when correctly spaced, as in position A.

Then by moving the stick to position B or any other position, and swinging it around one end, as shown, the exact distance "x" that the ob-



jects are out of parallel is easily measured. The fault is then readily rectified.—**W. F. Schaphorst, M. E.**

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FORT WAYNE [WITH MIGHT AND MAIN] STORAGE CO. THE SAME

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Wabash R. R.—Private Sidings—Pool Car Distribution

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Modern Fireproof Warehouses—Centrally Located—P.R.R.
Siding—Lowest Insurance Rates—Pool Car Distributors—
Local Cartage Service—Branch Office Service.

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Private Siding Indiana Harbor Belt R. R. Free Switching, Centrally
Located, Pool Car Distribution, Motor Truck Terminal, Operating on own
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Phone Gary 6131

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Downtown Location with RR tracks in building.

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All Merchandise On Check Out Cars
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Complete facilities for the storage and distribution of
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PRIVATE SIDING—BIG FOUR—CONNECTING WITH ALL
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Modern Cold Storage Locker Plant, 1400 Capacity

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Other Roads. Motor Freight Terminal. Agent Graydon
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AND TRUCK TERMINAL ON TRACKAGE
All Modern Facilities For Efficient Warehousing
and Distribution of Merchandise
DAILY SERVICE IN EVERY DIRECTION

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Fireproof Warehouse on trackage. Phone Dial 3-3653.

Branch office and Warehouse service—Mississippi
Valley reaching 20 Million Consumers.

Pool and Stop-over Distribution.

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Agents, ALLIED VAN LINES.

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Warehouse
on
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Private Siding—Free switch from
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51 years' warehousing nationally known accounts gives you Guaranteed Service
Daily reports of shipments and attention to every detail

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Pool Car Distribution
Special Heavy Equipment for Machinery, Boilers, Presses.
Siding C.R.I.&P. and D.M. Union Ry. Free Switching from any R.R.
Operators—Wholesale Merchants Delivery—Retail Merchants Delivery
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Established 1880
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Merchandise & Household Goods Storage
Lowest Insurance Rate. Pool Car Distribution. Private Siding. Free Switching. Free Rail or Truck Pick-up Service.

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Private siding CM&StP with full switching reciprocity—CRI—CGW—M&StL—CNW.

100,000 sq. ft. Dry Storage Space.
SPECIALIZE IN POOL CAR DISTRIBUTION with LOCAL CARTAGE FACILITIES. Member I.W.A.

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Merchandise Storage, Household Goods Storage, Pool Car Distribution, Local and Long Distance Moving.

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Fireproof Warehouse Motor Truck Service
Distributing and Warehousing All Classes of Merchandise and Household Goods

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Fireproof Storage and Sprinkler System

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25 WAREHOUSES 944,000 SQUARE FEET

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A dependable agency for the distribution of merchandise and manufactured products.



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An Able Servant to the PORT OF NEW ORLEANS

Complete warehousing facilities—Distribution—Weighing—Forwarding—Fumigating—Storage—Cartage—Field Warehousing—Office Space—Display Rooms—Sprinklered Risk.

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Sprinklered storage —
1,000,000 square feet.
Mdse. and Furniture.
Switch truck capacity —
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Nine warehouses, convenient to your trade.
Loans made against negotiable receipts.
Trucking Department operating 105 trucks.
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Standard Warehouse Company

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Complete Warehousing Service

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The Distribution Center of ARK.—LA.—TEX.

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Modern fireproof facilities with sprinkler system . . . Private siding . . . Watchman service . . . Low insurance rates . . . Truck connections with all motor freight lines . . . Courteous, efficient service for thirty-two years . . . IF you want your customers to get the best in Distribution Services HAVE HERRIN HANDLE!

HERRIN TRANSFER and WAREHOUSE CO., INC.

MARSHALL AT DAVIS STREET, SHREVEPORT 94
Household Goods Storage and Transfer. Trucking Delivery Service.

New Era Is Forecast On 'Old Muddy'

(Continued from page 30)

The bigger channel will mean that the great barge lines that ply the Missouri River can move up and down "Old Muddy" without trans-shipment at St. Louis. All barges are built for a 9-ft. channel.

Newspaper Controversy

One of the sidelight issues of the legislative activities on the Missouri has been the disagreement by two of the Mid-West's most powerful newspapers, The Kansas City Star and the St. Louis Post-Dispatch, both acting in what they feel to be to the best interests of the people. The Post-Dispatch conceived the idea of bringing all river construction activities under one authority, call it the Missouri Valley Authority, modeled after the Star contends that the program for Tennessee Valley Authority, but the Missouri takes in a much larger section and the TVA would, in all probability, not make a perfect working model.

Anyway, argues the Star, we are not interested in any proposal which would bring about the additional ir-

rigation of 4,000,000 acres that would offer competition to the farmers of Missouri and Kansas farmers. The Star feels that the Army Engineers and Interior Department should have the job of supervising the construction on the river, rather than the over-all authority of an MVA.

Navigation vs. Irrigation

There has also been a clash between the Interior Department and the Army Engineers which has heightened interest in the controversy on the program for the river. Army Engineers are interested primarily in flood control and navigation on the lower river, although they must go upstream to get and store the water which provides navigation. It is the job of the Reclamation Division of the Interior Department to irrigate. These two interests clashed because the Reclamation engineers asserted that if the Army Engineers put through their project there would be insufficient water for irrigation, and Army retaliated with the assertion that if the Reclamation Bureau took all the

water for irrigation there wouldn't be enough for navigation.

It is the consensus that there is plenty of water to supply all irrigation, navigation and sanitation needs of the entire basin, and the people of this area are interested in seeing all interests working hand-in-hand to curb the floods which are yearly a menace to farms and industries. They are eager for a navigable river that will bring about lower transportation costs to the region. Power would be a by-product of the program, but available if the demand arose.

Clash of States

The struggle between the so-called down-stream states of Missouri, Kansas, Nebraska, and Iowa, who urge the adoption of the Pick plan, which they feel is comprehensive enough to cover the needs of agricultural interests, and the up-stream states, particularly North Dakota, Montana, Wyoming and Colorado, which want a plan that stresses irrigation, is one of the major issues of the campaign.

But, say Mid-Westerners, we want the river harnessed and turned to use by man! We want the ball to start rolling just as soon as the war is far enough along. We want action!

With flood protection, irrigation and power creation upstream, and navigation on the lower river, experts on the river feel that this valley will be set for such development as has never been known.

Ambitious Program Proposed For Port of Boston

(Continued from page 40)

any hearings or investigations concerning the Port of Boston.

The Authority shall report to the Governor and Council annually in December or oftener if the Authority deems it necessary.

The Authority shall not have jurisdiction over the General Edward Lawrence Logan Airport.

With the approval of Governor and Council the Authority may acquire property by purchase or otherwise or by eminent domain under Chapter 79. It may lay out and build piers with buildings, etc. It shall equip same with fireproof sheds, tracks, cranes and other machinery and accommodations for the convenient, economical and speedy loading and discharge of freight. It may operate lighters and other vessels.

It shall make reasonable rules and regulations and administer same.

With approval of Governor and Council the Authority may enter rate agreements with the United States for purchase, lease or operation of any facilities owned by the United States and, pursuant thereto, op-

erate, manage, or lease same. It may lease for not more than 20 years facilities in its charge.

Boston Port Improvement

"The bill," says Mr. Lane, "provides for minimum requirements to take care of tonnage, based on pre-war figures."

"The Proposed Plan for Future Development of the Port of Boston" is contained in a brochure of some 12,000 words, including suggestions for "the Boston Enabling Act." In the Introduction of the Plan, it is stated:

"One of the most pressing postwar problems facing Boston, and in fact, New England, is the reconstruction and modernization of the Boston Port facilities. The manner in which this problem is handled will play an important part in shaping the future of the entire region."

"Boston is reported to be the only large port in the world that does not have a long-range program. The other important ports of the country, such as New York, Baltimore, Philadelphia, Mobile, and New Orleans, are

busy now with ambitious plans for the future and have the energetic support of their respective business and public groups."

Comparison With London

After noting that "Boston is now in a similar position to that of London four decades ago," with its docks and other facilities sadly neglected, and the subsequent position of London as the world's shipping center, following work of the Royal Commission and the establishment of the Port of London Authority, the Plan goes on to say:

"Boston likewise must meet the issue courageously by the adoption of a long-range comprehensive plan that will embrace all the diverse interests and by the creation of a modern port under the administration of a Port Authority with adequate powers to administer the affairs in an efficient and business-like manner. The program for the development of Boston must provide for adequate and modern facilities."

"The Federal Government has in-

BANGOR, MAINE

McLAUGHLIN WAREHOUSE CO.

Established 1875 Incorporated 1918

General Storage and Distributing

Rail and Water Connection—Private Siding

Member of A.C.W.—A.W.A.—N.F.W.A.—Agent A.V.L.

BALTIMORE, MD.



BALTIMORE FIDELITY WAREHOUSE CO.

Hillen & High Sts., Baltimore 2
T. E. WITTERS, President
Baltimore's Most Modern Merchandise Warehouses
Rail and Water Facilities
Pool Car Distribution—Storage—Forwarding
Private Siding Western Maryland Railway

For Details See Directory Issue
Distribution and Warehousing

BALTIMORE, MD.



Baltimore Storage Co., Inc.

N. W. Cor. Charles and 26th Sts.
Baltimore 18

MODERN FIREPROOF WAREHOUSE. EVERY FACILITY
FOR THE HANDLING OF YOUR SHIPMENTS.

Exclusive Agents for
AERO MAYFLOWER TRANSIT CO.
Vans Coast to Coast Canada and Mexico

BALTIMORE, MD.

CAMDEN WAREHOUSES

Rm. 201, Camden Sta., Baltimore 1
Operating Terminal Warehouses on Tracks of
The Baltimore & Ohio Railroad Co.
A.D.T. Private Watchman, Sprinkler
Storage—Distribution—Forwarding
Tobacco Inspection and Export—Low Insurance Rates
Consign Via Baltimore & Ohio Railroad

BALTIMORE, MD.

U. S. Customs
Bonded Drymen



Main Office: 6200 Bk. Philadelphia Rd.

DAVIDSON TRANSFER & STORAGE CO.

Household Goods and Merchandise—Storage—Delivery
—Unloading—Special Flat Bed Trucks for Lift Cases
Agents: Allied Van Lines . . . Member N. F. W. A.

BALTIMORE, MD.

Walter J. Bailey, Pres. A. Barnard Hays, Vice-Pres.

FIDELITY STORAGE CO.

2104-6-8 MARYLAND AVE.
Baltimore's Modern Fireproof Warehouse
Your Clients Efficiently Served All Collections Promptly Remitted
MOTOR FREIGHT SERVICE
Household Goods Pool Car Distribution Merchandise
Member of N.F.W.A.—M.F.W.A.—M.M.T.A.
Agent for Allied Van Lines, Inc.

BALTIMORE, MD.

Norman Geipe VAN LINES

524 to 534 WEST LAFAYETTE AVE., BALTIMORE 17
The Most Complete Moving and Storage Organization in Baltimore.
Long Distance Moving to 34 States—Certificates granted—MO-52452.
Tariff-Independent Movers' and Warehousemen's Assoc.

BALTIMORE, MD.

SECURITY STORAGE CO.

15 W. North Ave., Baltimore 1



EFFICIENT WAREHOUSEMEN
MOTOR VAN SERVICE

RESPONSIBLE AND COURTEOUS MANAGEMENT



BALTIMORE, MD.



TERMINAL WAREHOUSE CO.
 Founded 1893
 Davis & Pleasant Sts., Baltimore 2
 Operating four Modern Warehouses on tracks
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 Resources \$750,000
 Trucking Storage
 A.D.T. Watchmen
 Pool Car Distribution
 Bonded Space
 Financing Represented by
 Associated Warehouses, Inc., New York and Chicago

BOSTON, MASS.

Operated by Boston Tidewater Terminal, Inc.

CHARLES RIVER STORES
 131 BEVERLY STREET—BOSTON 14, MASS.



Located within the city limits. Adjacent to North Station. Brick and concrete buildings, some sprinklered and heated. A.D.T. burglary-alarm service. 300,000 square feet. U. S. Customs & Internal Revenue bonded space. Boston & Maine R.R. delivery.

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CLARK-REID CO., INC.
 GEO. E. MARTIN, President

GREATER BOSTON SERVICE
 HOUSEHOLD GOODS STORAGE—PACKING—SHIPPING
 OFFICES: 81 Charles St., Boston
 180 Green St., Cambridge
 Mass. F.W.A. Cdn. W.A.N.I.W.A. AVE.



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CONGRESS STORES, Inc.
 38 STILLINGS ST., BOSTON 10

GENERAL MERCHANDISE STORAGE
 Central Location—Personal Service
 Pool Car Distribution
 Sidings on N. Y., N. H. & H. R. R.

Protected By A.D.T. Service Number Mass. Warehousemen's Assn.

BOSTON, MASS.

Established 1896

PACKING MOVING
 D.W. **DUNN** CO.
 STORING SHIPPING
 Number May W. A. 1175 Washington St.

BOSTON, MASS.

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operating
ALBANY TERMINAL STORES
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GENERAL MERCHANDISE STORAGE
 B. & A. R.R. Delivery

Represented by
 NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
 10 WEST 42ND ST. PHN. 6-0000 1020 NEWBURY AVE., WILMINGTON

BOSTON, MASS.

Hoosac Storage and Warehouse Company
 Lechmere Square, East Cambridge 41, Boston
FREE AND BONDED STORAGE

A.D.T. Automatic Fire Alarm
 Direct Truck Connection B. & M. R. R.
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 Hoosac Store, Hoosac Decks, Charlestown, Mass.
 Warren Bridge Warehouse, Charlestown, Mass.

BOSTON, MASS.

W. A. KELSO
 Pres.

A. WALTER LARKIN
 Treas. & Mgr.

J. L. KELSO COMPANY

Established 1894
General Merchandise Warehouses
UNION WHARF, BOSTON 15

Connecting all railroads via A.D.T. Service
 Union Freight Railroad Co. Motor Truck Service
 Member of Mass. W. A.

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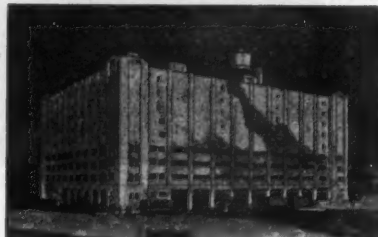
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vested \$35,000,000 at the Army Base and Castle Island. Consideration should be given now to the transfer of these facilities for commercial use as soon as military conditions permit, but since it is probable that it will be some time after the war before the Government will be in a position to make such arrangements, serious consideration must be given to modernizing the rest of the Port as soon as possible, for present facilities are grossly inadequate and antiquated.

In a "suggested program" of the Plan, "it is proposed that the affairs of the Port be reorganized under the jurisdiction of the Commonwealth, and that the new Authority be granted broad and strong powers for effective action, headed by a highly competent director.

Immediate Program

"The immediate program proposes that the new Authority acquire the property and construct new piers at:

1. Boston & Maine Docks at Charlestown. 2. Boston & Maine Hoosac Docks at Charlestown. 3. New Haven Docks at South Boston.

"Appropriations of \$4,700,000 have already been made for acquiring Piers 46-50 Boston & Maine Mystic Terminals, Charlestown, and the erection on the site of Pier 46 of one pier with two to three berths. In order to provide for the other aforementioned facilities it is proposed that the State Legislature appropriate \$15,000,000.

Of this amount, it is suggested that \$50,000 be earmarked as working capital."

In discussing "Operations of the Port," the Plan says:

"The question arises as to how the Port is to operate, whether under private or Government auspices. Even a cursory examination would reveal that a long-term investment by private interests would not only be unattractive but, because of the many diverse interests involved, would seem to be impractical of achievement. The city's financial position would not make it possible to be carried out under its jurisdiction.

"While as a general practice it might be highly desirable for the Port Authority to proceed with projects only as rapidly as it has leases or rentals for same, this would not be feasible in the case of the entire immediate program as this arrangement would likely cause undue delay when there is urgent need for action. It is interesting to note that three or four important interests have agreed to enter into negotiations on an amortization or rental basis. It is, therefore, recommended that the Port Authority proceed as rapidly as possible to meet the pressing needs, and thereafter to consider the advisability of proceeding with projects only as definite commitments are made for the use of the facilities, except of course in the case of general harbor developments and the like.

"The State would turn over title to all of its Port facilities to the Port Authority. This would include the Commonwealth Pier, Fish Pier, land at Castle Island, Logan Airport and the like, and all revenues for the use of these facilities would accrue to the benefit of the Port Authority."

Postwar Facilities

"Boston is in a tight spot in regard to shipping facilities for the postwar period. Only about eight berths capable of berthing Liberty ships or larger would be immediately available for commercial use, and some of them are not suitable for modern steamships. This does not include the five berths at Commonwealth Pier in South Boston that are leased to the Navy for the duration.

The following suggestions are made:

"1. The State should, as soon as possible, acquire the Boston & Maine Mystic Piers 46-50 at Charlestown, and reconstruct Pier 46, which would provide berths for 3 large ships. In response to recommendations by the Port Authority, the Legislature in 1941 appropriated \$4,700,000 for this purpose, but the project has been held up owing to wartime restrictions on materials and manpower. Plans for this should be in readiness so that this work may proceed as soon as the Federal authorities give the go-ahead signal on this type of activity.

"The Boston & Maine has agreed to

sell this property to the State and lease back on a long-term amortization basis.

"2. The Hoosac Piers of the Boston & Maine at Charlestown should be acquired by the State. Of the five docks at this location, all have been razed. A modern pier should be built on this site that would provide berths for four or five ships. This location is suitable for coastwise and foreign shipping. It is possible that steamship companies formerly located here and engaged in domestic trade might lease all of these facilities as soon as available.

"3. The State should acquire the New Haven properties consisting of Piers 1, 2, and 4 at South Boston, and construct modern piers that would provide berths for 5 ships. It is reported that two steamship interests are prepared to take long-term leases on two of these piers, so that two-thirds of this capacity could not be arranged for.

"The above program, covering Sections 1, 2, and 3, would cost perhaps in the neighborhood of \$15,000,000 and would provide modern facilities for about 12 ships. Add to this the 5 berths of the Boston & Albany at East Boston, and the Port would have capacity for 17 ships. This would provide a breathing spell in which to turn around, take stock of the situation, and make an appraisal of the future requirements of the Port, and to plot the course accordingly.

In conclusion, the Plan states that "this proposed program covers only the immediate minimum requirements of the postwar period. No consideration has been given to the movement of foreign trade both ways, nor to the need of passenger services. We believe that the projects properly belong to the province of the suggested new Port Authority, and we recommend that it give early consideration to these matters."

Clark Super Gas now operates barges and boats on the Mississippi River, and in the Gulf Coast into coastal canal. The firm has a marine petroleum terminal of 3.6 acres on Jones Island, and operates retail gasoline outlets here.

The tugs, the "Welcome" and the "Conrad Starke," will have as their first job, shifting of boats in mooring here so that grain and coal stored on them can be unloaded, releasing vessels for lake traffic. The tugs also will be called on to shift vessels under construction here.

The "grandfather rights" mentioned in the deal is an admiralty term for any rights or franchises which the former owners might have acquired.

The sale was made by the Meyer interests comprising 15 partners, that have operated the tug line for 75 years.

Emory T. Clark, president of Clark's Super Gas, and Max Paine, vice president, said the towing company will start at once preparing the tugs for opening of navigation season in early March. (Gahagan).

Two Tugs Purchased by Private Group For Operation at Port of Milwaukee

Purchase of two tugs by Clark Super Gas settled a question that has hung over the port of Milwaukee for two years: whether private operators

would take over the tugs, or whether the federal government again would be forced to step in and take over operations in 1945.

Air Transport Corp.

Air Transport Corp., Brooklyn, O., has been incorporated with 100 shares of no par value common stock, principals being Edgar J. Standing, K. E. Standing, and Arlo W. Mather. Herbert J. Coates, Broadview Pearl Bldg., Cleveland, O., handled legal details. (Kline)

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Future Shipping

A glimpse ahead is offered in the article
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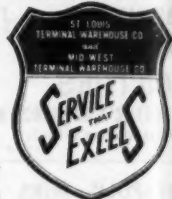
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Shippers of wastepaper by rail or water who have no rail siding or barge dock may add \$1 a ton to their ceiling prices when at their own expense they transport the wastepaper to a private rail siding or barge dock and load it on a freight car or barge, the Office of Price Administration announced last month.

This action, effective Feb. 17, represents an extension of a similar loading charge permitted when the wastepaper is transported to a public rail siding or barge dock and there loaded on a freight car or barge at the seller's expense.

Such loadings must be destined to consumers, and the addition can only be made when there is no rail siding or barge dock at the point of shipment or at the point where the paper was packed.

OPA said that the present limitation of the loading charge to wastepaper transported to public rail sidings or barge docks had resulted in the virtual elimination of wastepaper shipments through private sidings or docks other than those located at point of shipment.

of materials handled. The use of efficient equipment is dependent on ability to move it over sufficient floor space adjacent to spots where the cargo is deposited or picked up. Unless this operating area within the warehouse is provided, there is a direct penalty on efficient materials handling.

The warehouse as a transfer point may also require equipment to assure proper care for certain types of cargo. Refrigerators may be needed with meat products; ventilation facilities for other kinds of goods.

In general, warehouses will need to be longer and wider in size, have double track railway facilities and wide apron along side of ship.

In this manner goods can readily be transferred from freight cars into

warehouses where they can be moved about with modern materials handling equipment and finally be loaded from the spacious apron along side the terminal again by modern installations into the hold of the steamer. With all operations coordinated as a result of proper location of terminal, amplitude of space, direct railway connection, modern materials handling equipment and good facilities for loading and unloading of the steamer, the overall costs become the barest necessities.

It is, however, avoidance of unnecessary costs and passing on to final consumers everywhere the resultant savings that make for larger consuming ability for goods of all kinds and a healthy world trade.

Modern Terminals

(Continued from page 63)

Shipyards Compete In C-1 Vessel Building

A speed contest has been going on in two of Wisconsin's freight vessel building yards, the yards of Froemming Bros. Co., Milwaukee, and the Globe Shipbuilding Co., Superior, Wis. Each of these yards has been building the C-1 cargo ships.

Records show that one of these ships recently completed by the

Froemming yards in Milwaukee was completed in 154 days after the keel was laid, while it took the Globe yards 158 days to complete one. This compares favorably with the 195 days required to finish a similar vessel at the Kaiser ship yards on the West Coast. The vessels were 338 feet in length and of 4000 tons each. (Hubel).

Some Overseas Potentials In Air Cargo

(Continued from page 54)

problems always accompanying a one-way traffic movement.

Uruguay: Prospects for air commerce between this country and the United States are only fair due to the unbalance in number of potential commodities (282 southbound and 12 northbound) and values.

Venezuela: Factors favoring air cargo trade with this country are: (1) It is located just within the airplane operating range considered by many to be most economical. (2) More than any other Latin-American republic it is economically dependent on the United States for a very high volume of imported goods. Factors against a profitable air cargo trade are: (1) Potential trade is so heavily weighted on the side of exports that the costs per ton-mile in both directions will remain high unless some pay load can be found to fill the northbound planes. (2) The greater part of an enormous volume of potential trade is in low-valued commodities.

South Africa: Statistics of pre-war trade with the Union of South Africa (see Tables 1 and 2) indicate a substantial movement of commodities which might be considered as air

cargo potentials. The value of commodities which move in one direction appears to be nearly equal to the value of the ones making up potential return-trip cargo. On the face of it this is an ideal traffic situation but these figures are somewhat misleading if the methods of marketing certain South African commodities are considered.

The most valuable commodity listed in the Department of Commerce Report on air cargo potentials is diamonds, 1939 imports of which were valued at \$15,119,732. African diamonds, however, are normally shipped to London where they are sold at auction. Those purchased by American buyers are then shipped to this country. Since our official import trade statistics report the country of origin rather than country of shipment, these diamonds are credited to South Africa and not to the United Kingdom. Therefore, in discussing the potential volume of air cargo traffic between South Africa and the United States, diamonds shipped via London should not be included. The value of diamonds so shipped in 1939, was estimated at \$14,273,708. Sub-

tracting this amount from the total of \$17,878,632 shown in Table 2 leaves only \$3,604,924 as an air cargo potential and shows the volume which may move directly from South Africa to the United States not to be as large as is indicated by the statistics.

50c Too Low

As has previously been pointed out the Department of Commerce surveys set a minimum of 50c. per lb. on the value of commodities to be considered as air cargo potentials. This seems too low in considering potential traffic between the United States and South Africa because of the distance involved (6,786 nautical miles from New York to Capetown). The distance may cause air cargo rates to be so high that very few, if any, commodities valued at less than \$2 per lb. will be moved by air. Placing the minimum value per pound at \$2 instead of 50c. would reduce export and import air cargo potentials as shown in Table 3.

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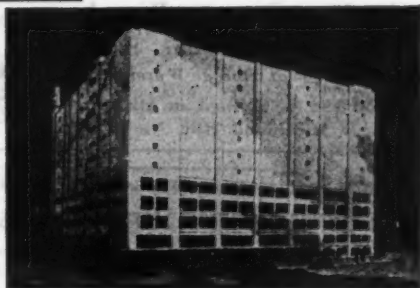
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markets, South America and South Africa, the situation is far from hopeless. Postwar overseas shipping will be different from prewar and the advantages of air over surface transportation will effect certain changes in international shipping habits. The airplane will be able to serve areas difficult or inaccessible to surface transportation thus permitting the economic and social development of areas hitherto inaccessible to any but the most primitive forms of transportation. Already many subpolar, equatorial and remote insular areas hitherto undeveloped have been opened up by air transportation.

Advantages of Air

Historically, first class sea transportation either for passengers or cargo has been confined to a few established sea lanes between seaports of first magnitude. The airplane places transportation of first quality within the reach of all world traffic centers regardless of their proximity to these few great sea lanes. For example, first class direct sea transportation either for passengers or cargo has not been available between the United States and the ports of the eastern Baltic. Travelers or shippers from the United States to Poland, Russia and Scandinavia could not enjoy either the frequency or the convenience of service enjoyed by the traveler or shipper between New York and London or Cherbourg.

The ability of the airplane not only to remove such inequalities of service but to permit direct interchange of traffic between interior traffic centers should have an appreciable effect upon the pattern of world shipping. In many cases air transportation will provide relatively convenient and economical transportation between points now separated by surface routes that are so long, costly and tedious as to prevent any traffic between them at all.

Time Saving

One great advantage of the airplane over surface transport lies in the great saving of time in overseas shipping by air. For example, the short air journey from San Antonio, Texas to Bogota, Colombia, requires by surface transportation a sea voyage, a river voyage and several overland trips. The Colombian portion alone of the surface trip requires 7½ days by rail, river and highway.

Transportation from Latin American seaports to interior points is generally difficult by surface transportation and in many cases impossible except by means of foot and mule. Even sea transportation between the principal Atlantic and Gulf ports of the United States and the great southeastern seaports of South America suffers an exceptional time disadvantage as compared with air transportation. Here distance favors

air transportation by a margin of from one to two thousand miles and time of travel favors air transportation by a margin of from 12 to 15 days.

Possibilities

The vast trans-Pacific distances afford air transportation its great opportunity in overseas shipping. Steamships from the west coast of the United States to Asia or Australasia need several weeks to reach their destinations, and traffic leaving from the great eastern ports of the United States and destined for Asia or Australasia must first travel some 2,500 miles southward to the Canal Zone before it can even start a westward journey.

The trans-Pacific area also offers excellent prospects for long-term air transport developments, particularly over the short great-circle Alaskan routes between the United States and Asia. The surface transportation systems in the Alaskan and Asian regions adjacent to these routes are generally primitive and inadequate. These regions include vast undeveloped areas rich in mineral, forest and sea resources. Air transportation appears destined to play a major role in the development of these resources, which should in turn stimulate a substantial volume both of local and long-haul air traffic.

\$100,000,000 Business On Airlines Predicted

In a recent talk, E. P. Hirt, traffic representative, American Airlines, Inc., declared that within the limits of about four or five years after the end of the war, air lines of America will be doing a \$100,000,000 passenger business instead of \$20,000,000 as at present and will employ 18,000 instead of 7200 men; estimates which he labeled both "conservative and sound."

Passenger fares, he predicted, would decline from 6c. a mile to 2½c. at the end of a ten-year period, and air freight rates might fall as low as 16c. a ton mile.

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Operating at a cost of 40c a ton mile or 5c a passenger mile and usable on hops up to 150 miles will be the helicopters designed for postwar feeder service by William and Tweney, Detroit.

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Pressurized Cabin Development Noted

American Airlines, Inc. has disclosed that the pressurized cabin in the Army's famous B-29 superfortress has certain design and operational developments which were carried out during the past two years of research by American working with General Electric Co. at La Guardia Field.

The same type of pressurizing equipment was used on the C-97 (commercial version of the B-29) which averaged a new record speed of 380 m.p.h. in its non-stop, high-altitude flight between Seattle, Wash. and Washington, D. C.

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Air Service

(Continued from page 51)

provide high frequencies of service with lower capital investment.

The ideal plane would have no need for a long operating range. It appears that a range of approximately 230 miles with full payload, 315 miles with 70 per cent optimum payload, and an absolute range of approximately 470 miles with 35 per cent payload, including standard fuel reserves, would be satisfactory. The survey also indicates initial and operating costs would be more important than high performance.

It is estimated that this ideal plane might cost from \$50,000 to \$70,000, and should operate on a direct flying cost of 17c. to 20c. per airplane mile. If indirect expenses are double this direct flying expense, operators could achieve the desired passenger fare of the 3.5c. per passenger mile, assuming express revenue would not exceed that now realized, and that there would be a compensatory mail rate.

Airdrome Transport, Inc.

Airdrome Transport, Inc., has been established at Los Angeles, with capital stock of \$500,000. Directors are Joseph D. Ferrant, Rolf W. Fogh and Evelyn Stewart of Burbank, Cal. (Herr)

The Magazine That Integrates All Phases of Distribution

CAA Advocates Private Aircraft Travel
As Organization Time and Money Saver

How appreciable savings in time and money can be achieved through travel in privately operated aircraft has been demonstrated by the Civil Aeronautics Administration in connection with its contract termination program. On that assignment, more than \$4,500 in fares, subsistence and salary time was saved by use of a Government-owned airplane.

Value of an aircraft to business executives was further demonstrated by the 83 per cent time saving; actual travel time was less than 103 hours by air against more than 609 that would have been required by rail.

The trip was made by a CAA Contract Termination Board of four members, one of whom served as pilot. They made 63 stops in 108 days. Best possible time by rail would have been 146 days, assuming trains would be scheduled exactly as needed.

Time saved by the Board was prob-

ably greater than would be the case in many business trips, however, because much of its business was conducted at airports. It was also true that the trip was made during favorable flying weather, only twice in 108 days was the plane grounded because of weather.

The cost of operating the plane, including depreciation, was \$886.47 less than train fares would have been. The time saving of 152 man days represented \$3,626.72 in cash, on the basis of \$17.86 average daily salary plus \$6.00 per diem subsistence allowance.

Time savings were especially notable when destinations were not regular railroad stops, or when natural barriers such as mountains made surface transportation roundabout. For example, the Board made a trip from Prineville, Ore., to Reno, Nev., in 2½ hours. By rail, it would have taken about 58 hours.

Air Express Reveals Records

A history-making total of 699,357 air express shipments were handled at LaGuardia Field in 1944, topping 1943's all-time high by 25.9 per cent, the Air Express Division of Railway Express Agency has made known.

In weight totals, this volume of business set another spectacular record with an estimated 10,135,000 lb. forwarded and received at the field, as compared with about 8,111,000 lb. in 1943.

D and W, April, 1945—119

Books and Catalogs

Directory of Public Refrigerated Warehouses. Complete listings of organizational set-up, facilities of all member companies, numbering about 350 and located in all parts of the country. National Assn. of Refrigerated Warehouses, Division of American Warehousemen's Assn., 1706 L St., N.W., Washington 6, D. C.

Basics of Supervision. By H. W. Heinrich. 180 p. 17 illustrations. Analysis of supervisory problems. Alfred M. Best Co., Inc., Safety Engineering Division, Best Bldg., 75 Fulton St., New York 7, N. Y. \$3.00.

Descriptive Labeling. Illustrated, 16 p. Prepared in inauguration of campaign for "descriptive labeling." Public Information Council, Grocery Mfrs. of America, Inc., 205 E. 42nd St., New York 17, N. Y. \$2.25.

Opportunity for Private Enterprise or Benefits for Business through Cooperative Group Insurance. 46 p. Employer-employee group insurance program report. National Physicians Committee, for E.M.S., Pittsfield, Bldg., Chicago 2, Ill.

Aviation Gasoline. Illustrations. 31 p. describing nature of aviation gasoline grades, ranging from 62 to 100 octane ratings, and methods of safe moving and storing.

Community Airports and Airparks. Regarding private flying expansion and development of private planes. Standard Oil Co. of New Jersey, Room 1610, 26 Broadway, New York 4, N. Y.

Airman's Almanac. 511 p. "All facts of flying easily and readily found." To be annually produced. First edition, February, 1945. Airman's Almanac, 247 Park Ave., New York 17, N. Y.

What Foreign Trade Means to You. Foreign trade and its effect on jobs in postwar era.

32-p. pamphlet, with charts, by Maxwell S. Stewart, Public Affairs Committee, Inc., 30 Rockefeller Plaza, New York 20, N. Y.

Individual Initiative and the Future of Motor Transport. Reprint in booklet form of address by Les Allman, vice president, Fruehauf Trailer Co., before Tennessee Motor Transport Assn. Fruehauf Trailer Co., Detroit, Mich.

Titchener Staples. 4-p. pictorial, detailed folder re standard, special Titchener staples. E. H. Titchener & Co., Walnut St. at Erie R. R., Binghamton, N. Y.

Lady, Will You Give a Lift? 24-p., illustrated booklet on women operators of power industrial trucks. Elwell-Parker Electric Co., Cleveland, O.

Bestran Ballasts for Fluorescent Units. 14-p., illustrated catalog re new Bestran technique in ballast construction. Hudson American Corp., 25 W. 43rd St., New York 18, N. Y.

Lear Know-How. Colored, illustrated booklet on present, potential Lear equipment uses. Lear, Inc., Piqua, O.

Thomas Multiple Punches and Spacing Tables. Bulletin 306. 16-p., 25 illustrations; complete condensed descriptions of multiple punches and tables. The Thomas Spacing Table in the Structural Shop. Bulletin 306 A. Companion to Bulletin 306, above. Describing mechanics of spacing table acting with multiple punch. 4-p., 5 illustrations. Thomas Machine Mfg. Co., Pittsburgh 23, Pa.

New Air Diffusion Catalog. Data on selection, application, location, assembly, erection, adjustment and testing of Kno-Draft air diffusers. Large, heavy paper covered catalog; 76-p., charts, other illustrations. D. W. B. Connor Engineering Corp., 116 E. 32nd St., New York 16, N. Y.

MOTOR TRUCK FACTS. Published by Automobile Mfrs. Assn., 830 Transportation Bldg., Washington 6, D. C. Sixth edition.

In the sixth edition of Motor Truck Facts is presented factual data recently made available concerning the truck industry, as a "producer of combat and transport equipment and as an essential transportation arm of our economic body."

"Trucks serving home and war fronts" is the theme of the text, concerning which Motor Truck Facts says:

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There are numerous charts and other illustrations in this compact 56-page booklet, which is colored in part.

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11 modern warehouses located in important shipping centers. Served by all railroads. Loading and unloading under cover. Storage-in-transit privileges. Goods of all kinds, bonded and free.

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WARTIME WAREHOUSING in Philadelphia

Over 1,000,000 square feet of space in 22 modern warehouses, with every transportation connection and the most modern handling facilities. Large modern fleet for store-door service.

A complete set-up to meet and improve your Philadelphia storage and distribution problems, with war-time economy. Full details on request.

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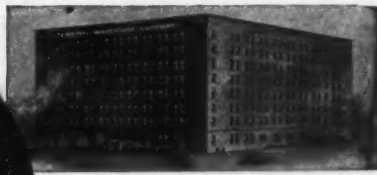
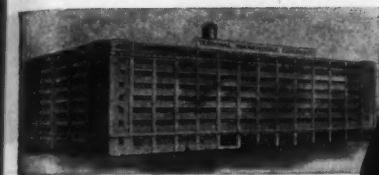
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-serving PHILADELPHIA AND VICINITY with Economy and Dispatch!

Strategically located throughout Philadelphia, they provide more than 68 acres of excellent storage space. Each building is equipped with every convenience, designed for the safe, prompt, and economical handling of goods of every kind. All earn low insurance rates.

Special provision is made for the storage of household goods.

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TERMINAL WAREHOUSE COMPANY

DELAWARE AND FAIRMOUNT AVES. • PHILADELPHIA 23

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Represented by
DISTRIBUTION SERVICE, Inc.

An Association
of Good Warehouses Located at
Strategic Distribution Centers



Members: A. W. A.

N. F. W. A., Pa. F. W. A.

Plan Improvement Of Cuyahoga River

A \$35,000,000 Cuyahoga River post-war improvement program is being planned by the Cleveland City Planning and Port and Harbor Commissions and the Chamber of Commerce which will unite to adopt a uniform program to submit to the federal government for aid.

Clifford F. Hood, president of the American Steel & Wire Co., and chairman of the Chamber's river committee, said the plan starts with the most urgently needed improvements and extends far into the future, covering the need for a large new general cargo pier if the St. Lawrence seaway project should be completed.

Mr. Hood stated improvements were imperative because the war has resulted in a step upward in the size of Great Lakes ships. Sixteen 600-foot long ore carriers were built while 36 small overage ships, such as go up the Cuyahoga River, have been withdrawn for scrapping. (Kline)

Awarded Contract

Goodwin Moving & Storage Co., Spokane, Wash., has been awarded contract for storage and transfer of household goods of army officers stationed at Ephrata air base, extending through the fiscal year of 1945. Minimum estimates of earnings for the company under the award are about \$10,000. (Haskell)

Producers Warned to Order Containers Early as Possible to Assure Stocks

Fruit and vegetable growers and shippers warned to order containers as far ahead as possible to assure adequate supplies to move crops to market. They also were urged to salvage and make use of used types.

War Food Administration officials emphasized the need for containers, both new and used, to avert a repetition of crop losses marking last season.

"The current packing situation does not warrant any assurance of ample supplies," WFA officials asserted. "Although supplies of fiber boxes and packages are about the same as a year ago, wooden containers will be considerably below new container requirements."

"Normal production of fruits and vegetables will put a heavy load on container requirements and above-normal production would increase this load materially," it was said.

Manufacturers of wooden containers here estimated that the supply of new wood crates and baskets this year would range from 50 to 75 per cent of the supply last year. If manpower and materials should become more critical the supply might dip below 50 per cent, it was said.

"Orders with used container dealers should be placed consistently from now on," WFA officials declared, "since these dealers have no place to store the large quantity which can be salvaged."

Railroads have cooperated in the effort to send crates to producing areas by reducing rates to \$1.50 per hundred pounds from the former rate of \$4 to \$5 per hundred pounds. They have also permitted the loading of refrigerator cars with crates after perishables have been removed in order to facilitate the return of containers to producing area.

Buys K-D Lamp Co.

Triumph Explosives, Inc., has purchased K-D Lamp Co., automobile lamps and allied accessories, Cincinnati, O., as the initial step in assuring continuation of manufacture and distribution of products for consumer use. (Kline)

Certificate Filed

A certificate of partnership has been filed at Buffalo, N. Y., for Kehr Warehouse & Storage Co., 127 Kehr St., by Harvey L. Pokrass, New York City; Harry Davis, Maplewood, N. J., and Charles R. Cook, Rochester, N. Y. (Toles)

Readers' Comment . . .



Pallet Pools . . .

"I have read with great interest your article in the January issue of *D and W* on pallet pools," writes Alvin Hertwig, Division of Simplified Practice, U. S. Department of Commerce, to Matthew W. Potts, materials handling editor.

"Our Division of Simplified Practice is undertaking to explore the subject of palletizing, with the purpose of developing a Simplified Practice Recommendation for industry. The contribution of your knowledge and experience in the field would be of special value to our efforts, and we will welcome any suggestion you may have."

Rang the Bell . . .

"This will acknowledge receipt of the January issue of your 1945 Shippers' Directory," writes G. V. McCarthy, traffic manager, Liquid Veneer Corp., Buffalo, N. Y., "and, as you promised, it did 'ring the bell.' We are enclosing our check for a year's subscription."

Standardized Pallets . . .

"For sometime we have been exploring the possibility of establishing a clearing house for standardized pallets in order to increase their use in warehousing and interstate commerce," writes Leonard L. Born, San Francisco, Cal., to Mr. Potts.

"In consulting Mr. N. M. Loney of the Fisher Body Division, General Motors Corporation, he states that he has been a large user of pallets and would be willing to cooperate in any attempt to standardize them. He further refers to the fact that at one time you had in mind an attempt to organize an association which would bring together material handling equipment users.

"Mr. Loney suggested that I communicate with you to inquire whether you knew of any developments along the line suggested, or if you have any constructive ideas to offer they certainly will be appreciated."

(Editor's Note: The National Bureau of Standards and the Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, are conducting a study jointly to deter-

mine the feasibility of establishing standard sizes for pallets and skids used in handling packaged merchandise in wholesale quantities.

A number of trade associations, including the Assn. of American Railroads, the American Trucking Assn., the American Warehousemen's Assn., etc., are cooperating with the Department of Commerce in this study. Information with respect to this study appears elsewhere in this issue and also on p. 56 of *D and W*, October, 1944.)

Pooling Pallets . . .

"My attention has just been called to the article in the January issue of *D and W* on the pooling of pallets by warehouses," writes W. E. Braithwaite, Division of Simplified Practice, U. S. Department of Commerce, "I would appreciate having an extra copy of the article referred to."

Commendation . . .

"This is to express to you and your associates grateful appreciation and

PHILADELPHIA, PA.

Complete Household Goods Service



QUAKER STORAGE COMPANY

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Agents for United Van Lines, Inc. Member: P.M.T.A., G.F.W.A., P.F.W.A.

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STORAGE, PACKING, CRATING and SHIPPING
POOL CAR DISTRIBUTION
LONG DISTANCE HAULING

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DUQUESNE WAREHOUSE CO.

Office: Duquesne Way and Barbeau St.
Pittsburgh 22

Merchandise Storage & Distribution

Members A. W. A.

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PENNSYLVANIA WAREHOUSE COMPANY

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MERCHANDISE STORAGE • POOL CARS DISTRIBUTED
MODERN SPRINKLERED BUILDING

CONSIGN SHIPMENTS
VIA PENNA. RR TO 12th STREET STA.

PITTSBURGH, PA.

THOMAS WHITE, Owner and Manager

13th AND SMALLMAN STS.
PITTSBURGH 22

*In the Heart of
Pittsburgh's
Jobbing District*

STORAGE IN TRANSIT
COMPLETE TRUCKING FACILITIES
PRR SIDING
A. D. T. PROTECTION

Also operators of

WHITE MOTOR EXPRESS CO.

Established 1918

WHITE TERMINAL COMPANY

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ED WERNER TRANSFER & STORAGE COMPANY

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Pittsburgh, Penna.

Storage, Packing and Shipping

Member of National Furniture Warehousemen's Ass'n.
Agent of Allied Van Lines, Inc.

SCRANTON, PA.

R. F. POST

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221 Vine St., Scranton 3

HOUSEHOLD STORAGE POOL CARS
MERCHANDISE STORAGE PACKING
LOCAL AND LONG DISTANCE MOVING
PRIVATE SIDING, D. L. & W. R. R.

SCRANTON, PA.

THE QUACKENBUSH WAREHOUSE CO.

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Cold Storage—Merchandise—Household Goods

3 Warehouses with private sidings on Erie & P RR's
reciprocal switching. Loans on Stored Commodities.
Cold Storage for furs—Cold Storage lockers—Quick
Freeze space.

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HOUSEHOLD GOODS PACKED, SHIPPED, STORED
LONG DISTANCE MOVING

Private Siding B. & O. R.R.

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General Storage and Distribution

Prompt and Efficient Service

12 Car Track Located on Lehigh Valley RR. Switches
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ALMACENES MARITIMOS, Inc.

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11 WAREHOUSE IN SAN JUAN, P.R.

Complete warehouse and distribution service

Warehouses located adjacent to Steamship Piers

Lowest rate of Insurance

SERVICE—SAFETY—GUARANTEE

ALMACENES MARITIMOS, Inc.

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Storage, Moving, Shipping

Fleet of Long Distance Moving Trucks
Member National Furniture Warehousemen's Assn.
Agent for Allied Van Lines, Inc.



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General Offices: 50 ALEPPO ST., Providence 9

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Specialists in bulk storage of all kinds—
Cotton, Wool, Hemp, Rubber

Over 400,000 square feet of sprinkler equipped space.

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Terminal Warehouse Company of R. I., Inc.

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Storage all kinds of General Merchandise, Pool Car
Distribution. Lowest Insurance.

Trackage facilities 50 cars. Dockage facilities on
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Shipping directions South Providence, R. I.

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Merchandise Storage and Pool Car Distribution

Modern Concrete Warehouse. 100,000 Square Feet of Storage
Space. Private Tracks Connecting with All Railroad and
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Distribution Center of South Carolina



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Pool Car Distribution. Private rail sidings.
Sprinkler equipped warehouse.



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Pool Car Distribution—Motor Truck Service

Low Insurance Rate

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135,000 square feet on Southern Railway tracks

Equipped with Automatic Sprinkler
Insurance of 15¢. per \$100.00 Household goods shipments
per annum. Pool Cars distributed. solicited. Prompt remittance made.

MEMBERS American Warehousemen's Ass'n
PROMPT AND EFFICIENT SERVICE

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General Warehouse Co.

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"Good housekeeping, accurate records,
Personal Service"

Located in the center of the Jobbing
& Wholesale District

Sprinklered Low Insurance
Private R. R. siding Perfect service



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"Memphis Most Modern Warehouses"

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Merchandise Storage & Pool Car Distribution
Local Delivery Service

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Merchandise storage, dependable service, free switching, Local cartage delivery,
Illinois Central and Cotton Belt Railway tracks. Automatic sprinkler, A.D.T. watchman.

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Storage (Wdco.)—Pool Car Distribution—Local delivery service—Office Space.
In the heart of the wholesale district and convenient to Rail, Truck and express
terminals. Eight car railroad siding—(N.G.&S.T. and L.&N.)—Refrigerated switch-
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Automatic Sprinkler System—Centrally Located

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Automatic Sprinklered—Spot Stock and Pool Car Distribution—
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Merchandise and Household Goods
Warehouse, Concrete Construction
30,000 Sq. Ft. Distribution of Pool Cars
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Public Bonded Warehouse at Alton, Corpus Christi, Harlingen and Victoria . . .
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Expert Handling; Inquiries Invited

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MERCHANDISE STORAGE—POOL CAR DISTRIBUTION
Our modern Centrally located fireproof warehouse is completely equipped to serve
you with over 75,000 square feet of merchandise and household goods storage space.

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Since
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BINYON-O'KEEFE
Fireproof Storage Co.

Since
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Second Unit Santa Fe
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Modern Fireproof
Construction—
Office, Display,
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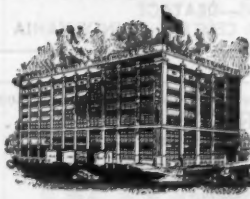
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Household Goods Storage,
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SPECIALIZING**MERCHANDISE STORAGE
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1100 CADIZ ST., Dallas 2CONTRACT OPERATORS FOR ALL RAIL
LINES AND UNIVERSAL CARLOADING &
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1,000,000 Cu. Ft. Cold Storage Space
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TEXAS AND PACIFIC TERMINAL WAREHOUSE CO.**MERCHANDISE STORAGE—POOL CAR DISTRIBUTION**

Sprinklered A. D. T. Supervised

Cooler Rooms

Enclosed Parking lot for Customers' Automobiles and Trucks

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LOW INSURANCE RATES

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"Bankers of Merchandise" "Service With Security"

International Warehouse Co., Inc.

1601 Magoffin Ave. Inc. in 1920 El Paso, Texas

Lowest Content Insurance Rate

Fireproof Storage of Household Goods, Auto & Merchandise. State
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In Fort Worth It's Binyon-O'Keefe

MERCHANDISE STORAGE—POOL CAR DISTRIBUTION
Our modern Centrally located Sprinkled warehouse is completely equipped to serve
you with over 80,000 square feet of merchandise and household storage space.

MOVING—STORAGE—PACKING—SHIPPING

Since
1875**BINYON-O'KEEFE**
Storage Co.Since
1875

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Associated with Distribution Service, Inc.

FORT WORTH, TEXAS

Agents—ALLIED VAN LINES, INC.

Storage, Cartage, Pool Car Distribution

**O. K. Warehouse Co., Inc.**

255 W. 15th St., Fort Worth 1, Tex.



HOUSTON, TEXAS

BINYON-STRICKLAND**WAREHOUSES, INC.**Merchandise Storage — Pool Car Distribution
Centrally Located — Lowest Insurance Rate
Private Siding Southern Pacific Ry. Co.

Goliad & Morin Sts.

Houston 18

commendation for the splendid issue of the 1945 Shippers' Directory," writes Charles Milbauer, traffic manager, The National Sugar Refining Co., New York. "Every year it seems to me it gets better and better and after 35 years this issue, a war issue, is outstanding, and you are to be congratulated for its appearance and effectiveness."

Air-Highway Coordination . . .

"For the past several months," writes Robert J. Thiel, Thiel Truck Service, Benson, Minn., "we have been receiving your circular relative to joint operation on motor freight and air cargo. I am vitally interested in this type of movement."

"I believe that the day is not long hence when the joint operation of motor trucks and the airways will take the lead in the transportation system of the nation."

Potts Manual . . .

"I have read some of the installments of your 'Modern Manual of Materials Handling Equipment,'" writes E. A. Rominski, technical engineer, Adirondack Foundries and Steel, Inc., Watervliet, N. Y., "and would like to obtain a copy of the complete work if such is available."

"I have found your study to be very complete and can appreciate the amount of work and talent required to prepare such a paper. I am sure that a copy of your manual will be a great help to our organization."

(Editor's Note: Because of the paper shortage and other restrictions it has been impossible to supply the many demands we have received for back copies of *D and W*. Perhaps the "Manual" will be published some day, but under present conditions it cannot be undertaken.)

New Storage Plans

Lyon Van & Storage Co. has completed plans for new 4-story storage building at Fresno, Cal., which will measure 110 x 75 ft., of Class A construction; contain air conditioning and built-in fire fighting facilities together with a refrigerated section. (Herr)

Warehouse Purchase

A \$500,000 offer for purchase of Pittsburgh Terminal Warehouse and Transfer Co.'s warehouse, 52 Terminal Way, South Side, Pittsburgh, Pa., was approved recently in Federal Court. Meyer H. Sachs, Sachs Real Estate Co., said the offer was made for a group of investors.

**Haiss Co. Names
New Distributors**

George Haiss Mfg. Co., Inc., New York, N. Y., has appointed the following new distributors of its equipment:

The Coast Equipment Co., San Francisco, Cal.; Union Tractor & Harvester Co., Ltd., Calgary, Alberta, Canada; Plains Machinery Co., Plainview, Tex.; G. C. Phillips Tractor Co., Birmingham, Ala.; Harrod Equipment Co., Syracuse, N. Y.; Herman M. Brown Co., Des Moines, Ia.; A. M. Flanders, Inc., Barre, Vt.

**Wire Bale Production
To Be Stepped-Up**

A step-up in the production of wire bale ties to meet a heavy Spring demand is being definitely considered, War Production Board officials told members of the Merchant Trade Products Industry Advisory Committee at a recent meeting. At the same time, industry spokesmen recommended that the WPB's Steel Division establish a small reserve of nails to meet urgent warehouse needs.

New Bekins Warehouse

Bekins Van & Storage Co., Los Angeles, Cal., has announced plans for constructing a 5-story reinforced concrete warehousing building, costing \$100,000, at Van Nuys, Cal. Plans call for a building covering an area of 70x90 ft. (Herr)

Valuable Painting Kinks

By W. F. Schaphorst, M.E.

ONE of the best painting kinks this writer has ever known was told to him by an experienced painter a short time ago and is of sufficient value to be chronicled in print. The painting expert said, "When you go up a ladder with a bucket of paint it is usually best to have only a small amount of paint in the bucket. Don't go up with a full bucket." His reasons were as follows:

1. If you should happen to drop the bucket and the paint spills out, you won't lose much paint and the possibility of damage to property will be less;
2. you needn't be as careful in handling paint as you must be if the bucket is full, hence you can work faster;
3. if you must use your hands for some other purpose and must let go of the brush temporarily you can place it upright inside the bucket, whence it cannot fall out; and, most important of all,
4. When dipping your brush you are not obliged to "look" for fear of dipping too deep or not deep enough, you know by the feel that when the brush touches bot-

tom you have the desired amount of paint on it.

Point 4 is particularly valuable when you are in a "tight place" as one sometimes is when on a ladder and it is difficult or even impossible to look downward. This therefore is a safety measure as well as a time-saving kink.

Another of this expert's pet kinks is to mix paint with putty when puttying the windows. He uses paint of the same color as used on the building or windows so that it will not be necessary to paint the putty after it is in place, which is always a rather difficult and time-consuming task. In fact, putty is too often permitted to retain its own natural gray color during its whole life despite its disagreement with the color harmony of the remainder of the building.

This expert has also found that he can make the putty stick better by first cleaning the window frames and adding a coat of paint before using his paint-mixed putty. Allow the paint to become almost dry and then

apply the putty-paint combination. The putty will then adhere very well, much better than without the initial coat of paint.

And finally, this expert has learned that the putty will stick better if the window pane is given ample clearance all around so that a "crack" will exist between the edge of the glass and the wood into which putty can be packed. In other words, don't make a tight fit when you put in a window pane; a "loose" fit is better if putty is to be used, and the reason why is logical and obvious in view of the above.

Western to Operate Cut-Off Route

CAB has denied petitions of United Air Lines and TWA for a rehearing on the highly-contested Los Angeles-Denver cut-off route, which was awarded to Western Air Lines last November. R. Backman, district traffic manager for Western Air Lines, recently received word of the decision, which, it was said, leaves Western in sole possession of this important franchise.

In this connection, Leo H. Dwenkotte, executive vice president, announced that passenger traffic over this route, which he said will operate the shortest coast-to-coast air schedule, will be activated with the delivery of the giant four-engined DC-4's and DC-6's now on order. (Gidlow.)

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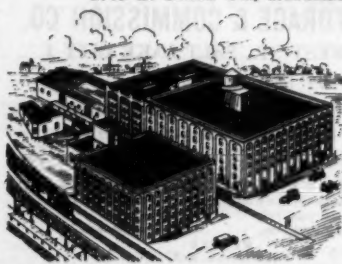
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COLD STORAGE

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People..

Alton Parker Hall, who joined American Chain & Cable Co., Inc., New York, a year ago, has been named general sales manager of the firm. (Kline)

L. Harold Anderson, recent governor-appointee to the California Railroad Commission, has been elected president of the commission for 1945. (Gidlow)

American Hoist & Derrick Co., St. Paul, Mo., has the following new officials: Frederic Crosby, board chairman; Harold O. Washburn, president; Rolf E. Ljungkull, vice president of engineering; Donald B. Botkin, vice president of manufacturing; Stanley M. Hunter, vice president of sales; James F. Bishop, secretary and assistant treasurer; Robert J. Henry, assistant secretary.

Hubert C. Watson, former assistant traffic-advertising manager, Pan American World Airways, and recently special assistant to the Atlantic division traffic manager at New York Municipal Airport, is now associated with Walter Dorwin Teague of New York City, well-known industrial designer, as consultant on aviation design.

L. C. Abbott, vice president and general manager, Fort Worth Warehouse and Storage Co., Fort Worth, Tex., has announced election of W. F. Meili, as vice president of the warehouse, and Miss Grada Lee Johnson as secretary.

Ralph T. Reed, president, American Express Co., was elected a director of American

Woolen Co., Inc., to succeed the late John E. Roumaniere.

Wendell G. Lowellen, assistant general sales manager, Chevrolet Motors division, General Motors Corp., has been placed in charge of parts and accessory merchandising, warehousing, and distribution. He will be assisted by I. W. Thompson as national manager of parts and accessory merchandising, and John P. Hopkins as national manager of warehousing and distribution. (Kline)

Ray Bell, director, public relations, Pennsylvania-Central Airlines, has been named chairman of the publicity committee, Air Traffic Conference of America, which includes publicity and public relations directors of all domestic and International United States Flag carriers. (Kline)

Howard A. Wells, Reno, Nev., has been re-elected president, Nevada Motor Transport Assn., and all 1944 officers named to support him again during the current year. Harley A. Harmon is association manager. (Gidlow)

At the annual election of the Dairy Industries Supply Assn., George H. Scragg, director of advertising and sales promotion, White Motor Co., was named director representing the delivery phase of its activities.

J. A. Burkley, co-partner, Freight Traffic Institute, Chicago, Ill., has been elected president, Trafficmen's Assn. of America. Others elected are: first vice president, H. H. Behrer, Booth Fisheries Corp.; second vice

president, Wm. P. McLaughlin, Kimbel Lines, Inc.; secretary, E. C. Veit, Jr., Victor Chemical Works; treasurer, Howard Fahlman, United Shipping Co. Three new directors were elected: George J. Gabler, Cross and Blackwell; Zeldon Parkhurst, New York, Chicago & St. Louis R.R.; and Earl W. O. Bogan, Aero-Mayflower Transit Co., retiring president of the association. Following were re-elected as directors: Fred E. Foster, U. S. Rubber Co.; Robert L. Hill, Union Freightways, Inc.; George N. LeMaire, Doyle Freight Lines; D. H. Lightsey, Rainbo Express, Inc.; Frank L. Minton, Purity Bakeries Corp.; James W. O'Gara, M.S.P.&S. Ste. M. Ry.; L. E. Purnell, Burlington Transportation Co., and N. W. Putnam, Gamble-Skogmo, Inc.

J. C. Scott, manager, Material survey department, Fruehauf Trailer Co.'s Detroit plant, has been transferred to Chicago.

John H. Middlekamp, recently resigned director of the Automotive Division, War Production Board, has been appointed manager of the Government Department, Mack Trucks, Inc. He was director of the automotive division of WPB from Jan. 1, 1944, until his resignation Jan. 6 of this year. Prior to that he had spent a year and a half as a lieutenant colonel with the Army handling its truck production problems, resigning to join WPB.

Appointment of Harry R. Kluth, Philadelphia, as general manager, Pittsburgh Plate Glass Company's 77 warehouses, has been announced.

As result of increased operations all over the Pacific Coast in shipping and operation of vessels, the James Griffiths & Sons organization, after re-opening its San Francisco, Cal., office and appointing J. V. Weber, of Seattle, Wash., a branch manager of that port, has appointed P. A. Curry, widely known shipping man as manager of the Vancouver, B. C., office. (Litteljohn)

L. Harold Anderson, formerly city engineer, Palo Alto, Cal., has been elected president, California Railroad Commission for 1945 term. He was recently appointed a member of the CRC by Gov. Earl Warren. (Herr)

Russell Bevans, district supervisor, I.C.C.'s Bureau of Motor Carriers, San Francisco, Cal., for the past nine years, was appointed secretary-manager of the Draymen's Assn. of San Francisco at a recent executive committee meeting. Mr. Bevans succeeds the late Joseph F. Vizcard. (Herr)

Electric Storage Battery Co., Philadelphia, Pa., manufacturer of Exide Batteries, announces appointment of J. A. Cronk as manager of the company's Atlanta branch. He succeeds Mark C. Pope, Jr.

H. Sherburne Wiggin, of Wiggin Terminals, Inc., is Red Cross chairman for the warehouse industry in Greater Boston. (Wellington)

Charles H. Washam is newly named manager, New Mexico Motor Carriers' Assn., succeeding H. J. Armstrong. Washam previously served as manager of the Navajo Freight Lines. He has a long career of service with various phases of the industry behind him. (Gidlow)

Appointment of George D. Rash to the newly-created position of manager of schedules and tariffs has been announced by Continental Air Lines.

John D. Clark has resigned as secretary, traffic and transportation division, Youngstown (O.) chamber of commerce to become

Correction

In last month's issue, the name of M. B. Bowen, newly elected vice president, Illinois Assn. of Merchandise Warehousemen, was misspelled inadvertently as Bowers. Miss F. E. Berg, now treasurer, was stated to have been named as secretary instead.

commerce attorney for the American Truck Assn. with headquarters in Washington. He will handle freight cases for motor truck carriers before the Interstate Commerce Commission and various public utilities commissions, and will also handle other legal matters.

With the resignation of R. R. Howard as vice president and general sales manager, Anthony Co., Streator, Ill., C. H. Worrells, who for many years has been treasurer of the company, now takes over the duties of general sales manager.

Capt. Amos E. Brooks, former executive secretary, Southwest Warehouse & Transfermen's Assn., Ft. Worth, Tex., is home on leave for three weeks, after which he will report to Miami Beach, Fla. He has been given six months limited service in the States. At the end of that period, he will automatically report to the hospital for a check-up and further orders.

Wayne A. Johnston was elected president, Illinois Central System at the meeting of the board of directors in Chicago recently. Mr. Johnston is the 16th president of the railroad and succeeds the late John L. Beven.

Richard F. Hogan, traffic manager, Warner Co., has been elected president, Traffic Club of Philadelphia, Pa.; Charles N. Hale, general agent, Chicago & North Western Railroad, first vice president; C. J. Goodyear, traffic manager, Philadelphia & Reading Coal

& Iron Co., second vice president; T. E. Glick, traffic manager, John T. Lewis & Bros. Co., historian; C. A. Donze, traffic manager, Gimbel Bros.; E. G. Stewart, traffic manager, Lukens Steel Co.; J. M. Thistle, general agent, Wheeling & Lake Erie Railroad; W. H. A. Turner, general agent, Missouri Pacific Lines; Robert Maguire, assistant manager, Atlantic Refining Co.; Reed Warlock, division sales manager, Associated Transport, Inc., directors. Mr. Turner will serve for one year, the rest for three.

George F. Tally has been appointed assistant general traffic manager, Swift & Co., Chicago, Ill. He has been with Swift since 1917, and was recently in charge of the rail division. (Slawson)

C. Blake McDowell, treasurer and director, Federal Storage Co., has been elected a director, First-Central Trust Co., Akron, O. (Kline)

Dan Dalberg, Westheimer Transfer & Storage Co., Houston, Tex., has been named chairman, Houston Freight Carriers' Assn.'s Planning Committee. Ralph Logan, Fisher G. Dorsey Interests, is also a member of the committee.

North American Van Lines, Inc., has named Merle Fullerton, who has previously served as president, chairman of the board; Clarence E. Williams, president; Virgil E. Freeman, general manager and vice president.

J. Randolph Scott has been named general passenger agent, Detroit and Cleveland Navigation Co., with offices in Detroit, Mich. (Kline)

E. A. Menhall, for past several years secretary-treasurer, Highway Trailer Co., Edgerton, Wis., has been elected president. (Kline)

The Merchants Refrigerating Co. has announced that A. Douglass Walker, formerly sales manager, Security Storage Co., Ltd., has joined the Merchants organization in the capacity of vice president in charge of business development.

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Reynolds Transfer & Storage Co.

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Merchandise and Household Goods Storage Pool Car Distribution

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4. Burglary Protection; Bonded Employees
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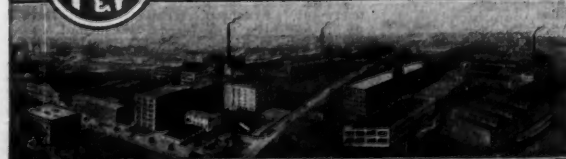
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Cooler, Freezer and General Merchandising Storage
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on C.M.St.P. & P. R.R.

SHEBOYGAN, WIS.



SHEBOYGAN

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Potentialities of overseas air cargo are discussed by Dr. Frederick on page 52 of this issue.

Norman R. Miller, application engineer at San Francisco, Cal., for the Marine Division, Westinghouse Electric & Mfg. Co., for the past two years, has been transferred to Los Angeles, Cal., to fill a similar post.

F. J. Degnon, vice president, Mack Motor Truck Co., is now manager of the firm's New England division, according to the announcement made by C. T. Ruff, president of Mack Trucks, Inc. Mr. Degnon will make his headquarters in Boston.

Sherman Paper Products Corp., Newton, Upper Falls, Mass., has announced appointment of Allyn G. Whitehead to position of western sales manager with headquarters in Chicago; Jules E. Timer, eastern sales manager, headquarters in New York; Arthur Hardigan, sales manager, display division; P. E. Sheehan, sales manager, specialties (Wellington).

Otto Willett has been named vice president and traffic manager, Cleveland-Cedar Point Steamship Co., which operates the oil-burning lake passenger steamer, Theodore Roosevelt, on daily and nightly cruises out of Cleveland harbor. Willett was traffic manager for the C. & B. Steamship Co. and for the D. & C. Line as well. (Kline)

Announcement has been made of the appointment of James J. Fulcher as vice president and general manager, Buffalo Merchandise Warehouses, Inc. The appointment occurred on the 25th anniversary of his association with Mr. John L. Keogh, president of the company.

Floyd L. Bateman of Chicago, Ill., has been elected treasurer, National Furniture Warehousemen's Assn., by the Board of Directors to succeed Charles Blane of Pittsburgh, Pa., who has resigned after serving as treasurer of NFWA for the past three years.

Mr. Bateman is well known throughout the warehouse industry and holds the distinction of having served NFWA as its second president during the years 1922-24. Currently, Mr. Bateman is serving as chairman of the Association's Silver Anniversary Committee.

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OBITUARY

Col. Edgar Staley Gorrell, 54, president, Air Transport Assn. of America, since its formation in 1936. He was known as the "czar" of commercial airlines. He had been an aviation enthusiast since, as a cadet at West Point, he had witnessed the sensational flight of Glenn Curtiss from Albany to New York on May 29, 1910.

Among the aviation firsts credited to Colonel Gorrell are: first to start an organized system of airports; first to build airplane hangers out of steel; first American pilot ever to fly a plane taking automatic air photographs; first American pilot to fly an airplane conducting experiments in radio; first American Army officer to volunteer for a parachute jump; first American Army officer to successfully make an Army airplane night flight, and first member of the United States Army to receive a degree in Aeronautical Engineering, Master of Science, from M. I. T.

Alfred May, assistant vice president, Davis, Turner & Co. He was a member of the Philadelphia Traffic Club.

T. Shelby Black, 67, widely known in petroleum industry. He was president of Jenkins Petroleum Process Co. and Donnelly Process Corp.

Ole S. Hansen, 45, a founder of Hansen Transportation Co., which operated in early pioneer days of Pacific Northwest steamers out of Poulsbo, Wash. (Littelljohn)

Robert Lee Taylor, 80, prominent fruit grower and cattle raiser of Virginia.

Louis Werk, 71, secretary-treasurer, M.

Werk Co., soap manufacturers. (Kline)

Master Sgt. Thomas Virmelli, 51, founder of the Mayflower Airline, overseas.

James R. Phillips, 65, superintendent, Dayton Pump & Mfg. Co., Dayton, O. (Kline)

Joseph F. Vizard, 54, in Larkspur, Cal. For 20 years he was secretary-manager, San Francisco Draymen's Assn. and lately, also secretary, San Francisco Movers. (Gidlow)

James J. Levins, 74, controller and treasurer of the Cleveland News for nearly 33 years. He was also assistant treasurer, Forest City Publishing Co.; publisher of the Plain Dealer and the News. (Kline)

Maurice E. West, 62, president, West Ice & Cold Storage Co., Fond du Lac, Wis. He was active in the organization of the Galloway-West Co. in 1910 and he organized West Ice & Cold Storage Co. in 1939.

R. B. M. Burke, 61, vice president, Harbor-side Whse. Co., Inc., N. J. Mr. Burke, who had been with Harborside since 1940 and previously served in several executive capacities with the Pennsylvania Railroad, is credited with having developed the Harborside company into one of the leading terminals in New York. He was a member of the New York Traffic Club, the New York Railroad Club, the Maritime Exchange, the New York Mercantile Exchange.

Walter W. Schwenk, 44, Atlantic Coast director, War Shipping Administration. He was a member of the Propeller Club.

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